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Agricultural.

HINTS FOR THE SEASON.

August, usually hot and sultry, but less scorching than its fiery predecessors, is here. The summer crops, we suppose are gathered in; seeding, with the exception of the winter crops, is over for the season, unless it may be for a few late turnips among the corn, or the August seeding of grass land; and the farmer has time to turn about and see what is to be done next.

Everything in its Time.

A few months ago, we were represented as having said in a farmers' club, in this city, that the great difficulty with the farmer is to find enough to do. We hope nobody believed that we said so foolish a thing. There is always more to do on a farm than can be done. The great thing is to do that, which with reference to immediate profit and future improvements, duly estimating both, is best to be done; and so to distribute the work over the year as to mitigate the severity of labor in pressing times, and avoid occasions of indolence at other seasons—to keep the men and the teams reasonably employed at all times, and overworked at none.

We would advise our friends, now

standing, as we suppose, on the outside of the summer harvest, to review a little, and see what they have been called from the field to do these last months, which might as well have been done at a less pressing season; and so be prepared in future to guard against inconveniences, with which they have now been troubled. It requires more practical wisdom to manage a farm in the best manner, than to command an army; and not a little of this required wisdom is to be obtained by reflection and forecast—by allowing the past to correct the future—looking at past errors, not so much to mourn over them, as to correct them; as, if the best hand was called from the field, this year, to prepare fuel for the cook, to make it the occasion of a resolute purpose, that the fuel shall all be ready in January of next; or, if the cattle broke into the corn in wheat harvest, to make it a reason for having the fence strong enough for all out doors, before another February passes; or if a small building had to be erected or a roof shingled in haying time this summer, to let it have the effect to make you take care of all such matters in spring or autumn hereafter. None of us are born

wise, but if we do not learn by experience, we are hopelessly unwise.

Most farm work, as the putting in of crops, cultivating them, harvesting them, and finally disposing of them, is to be done, not when the farmer wills, but when the season demands. Other work may be done at any time; and yet there is a vast difference in the result, whether you do it in the best or the worst time. To distribute farm labor pretty equally through the whole year, so as always to have something to do, and seldom more than can be done deliberately and well, is one of the most important problems for American farmers to solve. None can settle this so well as the farmer himself on each farm, and therefore we advise him to make it a study. Let each settle the best routine for the year, and the best time for odd jobs, in his own case; and then let none say that the agricultural papers have misled them. Our idea is that each farmer must do his own thinking; and that if he suffers his agricultural paper to think for him, or to dictate to him, it is about good enough for him if he is misled.

But thinking is not all the farmer has to do. Perhaps we might say, his is an easier life; for we must conclude that thinking is a pretty hard business, when we consider how much more averse most men are to it than to the ordinary forms of labor. Sure we are, that many farmers would do better, if they were as willing to think as they are to work. Reading is a good thing, but for the working farmer it is good, only about in proportion as it sets him to thinking for himself. But let this go.

Summer Seeding.

By some it is thought to be a good practice to seed after corn, putting in the grass seed at the last hoeing. On this question we are not prepared to speak positively. Manifestly, if this is done, a perfectly level cultivation of the previous crop should be practised, and a roller should be subsequently applied to

crush in the corn stalks, and roll in whatever small stones may be left on the surface, provided the better course of cleaning them off be not taken.

In many parts of New-England it has been a common practice, one which we do not recollect to have heard condemned by good farmers, to follow corn with rye and grass seed, sowing while the corn stands in the stooks, the strips on which these stand having been previously cleared and sowed.

But who, so well as the farmer himself, should judge of the merits of this practice. He not only sees how his own lands produce, after various modes of culture and successions of crops, but how those of his neighbors produce. Careful observation of whatever is passing about him, if not the first, is the second trait of a good farmer. Farmers' eyes, like those of other men, are always open; but it would seem, as if some, seeing, see not, while others see and note everything, and become wonderfully intelligent by it, in most things that relate to their calling.

August Seeding of Mowings.

Not unfrequently a meadow becomes turf bound. There is a redundancy of roots in the soil; and although by no means exhausted, in the common acceptance of the term, not destitute of the elements of future crops, yet that land produces little, because these elements are in a sort of dormant state, locked up in the undecayed roots of former crops, and not in a condition to enter the roots of growing plants. You would say, "plough it up; that turf will be manure to a crop of corn, and after the corn it will give a heavy crop of oats, barley, or rye, and then first-rate crops of clover, and herdsgrass." That is certainly a sensible view of the subject; but then almost every farmer has land, which for reasons best known to himself, he would wish to keep in grass perpetually.

In such a case August seeding comes in play. Now that land is not too poor

to produce two tons of hay to the acre, and yet it fails to produce one, because there is a thick blanket of undecayed, but slowly decaying vegetable matter over it, acting like the dog in the manger, not feeding the grass itself, nor letting the soil below feed it, nor allowing the air its proper circulation. The whole for ten or twelve inches wants to be turned over; and as the turf, which will eventually become as manure to the crops, is deposited at the bottom, whatever manure is applied, we think, should be harrowed in nearer the surface, for a quicker effect, so that between the turf below and the more quickly acting manure above it, food for a long succession of grass crops may be furnished.

It has not been within our practice to seed land thus, but from abundant testimony, some observation, and the reasonableness of the thing, we are inclined to think well of it. We would plow 12 inches deep, say more or less, according to the nature of the soil and the quantity of manure we meant to apply; harrow in first the manure, running with the sod, and then the seed, running in the same direction; and after picking off the small stones, if any, finish with a light roller.

Five lbs. of clover seed and 15 lbs. of timothy; or 4 lbs. of clover, 12 lbs. of timothy, and half a bushel of red top, would, in our judgment, be a good seeding; but the kind and quantity of the seed, it would seem to us, should be determined very much by the experience of the farmer. He knows the character of his soil, what grasses flourish best upon it, and to what uses he means to put the hay; all of which, and still other considerations, known perhaps only to him, have a bearing on the question.

We never can come to the business of teaching the farmer as the doctor does the nurse, prescribing so many spoonfuls of this and so many of that, and so often, without reference to his superior knowledge of his own business.

It is quite possible that the quantity of seed mentioned above may be considered too small. Secretary Flint, of the Massachusetts Board of Agriculture, says: "I have in my possession letters from some of the best farmers in Berkshire, Plymouth, and other counties of the commonwealth, in which they state that it is the prevailing practice to sow a bushel of red top, half a bushel of timothy, and from 4 to 6 lbs. of red clover to the acre." These farmers would tell us not to spare the seed, that it is the cheapest manure we can buy. That is good advice. It is founded in truth. To stock the soil with vegetative life, to make it send up millions of spires, each to draw nutriment from the air, and to deposit it as organic matter in the soil, is unquestionably the cheapest way of manuring land.

But then it is well enough to inquire what is the cheapest way of stocking the soil sufficiently with seed. We can think of but two ways;—one to spread oceans of seed upon an unprepared surface, to follow with a coarse harrow, covering most of it so deep that it would never see the light, some too shallow, and but little just right, in which case perhaps one seed in thirty might produce grass; the other, to prepare the surface properly, making a handsome seed bed of every inch, to sow a reasonable quantity of seed, and then so to cover it with a bush harrow, that as many as one seed in six, instead of one in thirty, will produce.

The objection to the first course is, that if you apply ever so much seed, your ground will not be evenly seeded, nor will all of it be seeded at all; and if that which is buried too deep ever to emerge, has some little effect as manure, rotting in the soil, it can not be regarded as a very cheap manure, when used in that way. What makes seed a cheap manure, as the farmers often say of it, is, that it sends up a living plant, to draw from the air in favor of the soil. If it

fails to do this, it is still a manure, because it contains the elements of plants and will impart them to growing crops, but is a very dear manure, at the prices at which grass seeds are usually sold.

Secretary Flint has computed, that in a pound of white top seed, there are 8,000,000 seeds; in a pound of red top, 6,800,000 seeds; in a pound of timothy, 1,168,000; in a pound of white clover, 512,000; and in a pound of red clover, 256,000. If these figures are anywhere near the truth, then the seedings suggested by us with red top, timothy, and red clover, would give 55,884,000 seeds to the acre, which would be, if we compute correctly, about 23 clover seeds, upwards of 300 timothy seeds, and more than 900 red top seeds to the square foot; of all kinds more than 1200 to the foot, and not less than 8 to the square inch—quite enough we suppose, if so dispersed in the soil that one seed in six will produce a living plant, but certainly not enough, if nine-tenths of it are to be sunk a returnless distance between rough burrows and in deep stone holes.

According to Mr. Secretary Flint (and we thank him for his labored investigations, though we should rather have the opinion of old farmers, if we could have but one) the best depth for covering clover seed—that in which the greatest number of seeds germinate—is, in inches and fractions of an inch, from 0 to $\frac{1}{2}$; timothy, from 0 to $\frac{1}{4}$, and generally, for the smaller seed less still. He states, as the depth beyond which red clover will not germinate, 2 inches; and that below which timothy fails to germinate, the same. These of course are to be considered as average depths, increasing with the lightness of the soil, and diminishing as its density increases. To what extent it is wise to undertake to make up in a large quantity of seed for a shabby way of covering it, every farmer must judge for himself. We would say prepare a nice seed bed, and then put on seed enough; for it must be admitted

that the expense of a few pounds of seed is trifling compared with the benefit of securing a good crop and a turf as rich and uniform as the soil permits.

The above calculations of seeds to the foot and inch have been made in the haste of writing, in the hottest weather remembered by the oldest inhabitant, one's brains fairly boiling, and if any body will correct them, we will promise not to be offended. Perhaps it would be a good amusement for some of the boys. They will gather from the old arithmetic, that in square measure, 144 inches make a foot; $272\frac{1}{2}$ feet a rod; and 160 rods an acre.

Strawberry Bed.

Now is the time, if you did not do it in April, to put out a bed of strawberries. They may be planted almost when you please, except in fruiting time. April and August are perhaps the best months. If planted in April, you may get a small crop the first year, and a big one the second. If planted in August, you will not begin to pick fruit in three months, as in the other case, but you may get nearly a full crop next year, only ten months, not long to wait.

Every farmer should appropriate a patch to this purpose. It is astonishing what quantities of strawberries have been brought to New-York this summer, and how much money has been carried into the country for them. To the citizen they are no longer a luxury, but a necessary food. Every basket that has been sold has been a *good* bargain, both to the producer and the consumer.

More than 8,000,000 baskets have been sold in this market. For these the farmers and gardeners have \$250,000 or a little more. The hucksters have made at least \$250,000. The consumers have paid more than \$500,000, and cheap enough. The only thing we are sorry for is that the farmer has not got a rather larger proportion of what the consumer has paid.

The consumer has got as much of the

elements of food—the alkalies, phosphates, etc., necessary to the system, combined with sugar and a most agreeable acid—as he could have bought for the same money in any other form; and the producer has carried off at the rate of two, three, four and five hundred dollars an acre for the fruit. That we, in the city, should be thus agreeably and economically fed, and the producer get such a return, is what we call a good bargain on both sides.

There is not half as much extra labor required in the cultivation of strawberries above the expense of general crops, as is usually supposed.

One man, who has cultivated the sixteenth of an acre, and sold the produce for fifty dollars, besides enjoying an abundance at home, tells us that, till picking time, the expense of cultivation does not exceed that of cultivating the same ground with corn or potatoes. He says it requires a little more work, but much less manure; that between the two the expense is about the same. We do not quite believe this, but it is nearer the truth than most would think.

The land in this case was a light loam, not reputed a very capable soil, but easy to work. He used no manure, except to plow under a few sea-weeds when the bed was planted, and to apply a very little salt hay around the hills in fruiting time, to keep the berries from the ground. The picking, of course, requires time, but not very much, because the berries are large; and it can be done by a person not sufficiently strong to mow and pitch hay. Farmers, do not fail to have a strawberry bed. If you cannot possibly find time just now, prepare it any time before the end of October. The strawberry is a most accommodating plant. It will grow in all climates, on almost every variety of soil, and what is wonderful, will, under skilful management, ripen almost at the cultivator's pleasure, giving its fruit for a long time. We can

not believe it would have been thus general and accommodating, nor that its analysis would show the ingredients it does, nor that its consumers would enjoy the health they do, unless the Giver of all good had intended that man should use it as food more than he does.

Select a medium loam if you have it. If it is a little clayey, plow in the more light materials, as named below. If inclined to be sandy, use more ashes. Peaty land, if well drained and ashed, is as good as any other, some say better; and peat is a valuable addition to sandy land, for this fruit. Everybody must have noticed that strawberries grow unasked in newly cleared land. We have seen them monopolize whole meadows. Well, you can make old land about the same as new by plowing in plenty of leaf mold from the woods, and applying ashes.

Some persons think, and instructions have been given to that effect, that for a strawberry plot you must apply about as much manure as would bring you half a dozen acres of good corn. Never was a greater mistake. The strawberry is more cheaply manured than anything else.

If you try a sixteenth of an acre, (5 rods by 2, or its equivalent,) carry on a dozen loads of partially decayed leaves and black mold from the woods, or half as much sea-weed, if you can get that more conveniently; spread it on the surface; plough and mix up to the depth of a foot or more; clean from the surface every obstruction to fine tillage; and make a smooth bed for the plants.

Mark the rows 20 inches apart, and set the plants 10 inches in the rows from each other. Some would say 18 inches by 12. Suit yourself as to that. After setting, shade the plants a few days if it is sunny, by laying bits of board on bricks over the plant, or by sticking a bit of board, or a wide shingle a slope on the south side; and it is well to mulch with straw, sea-weed, refuse hay

or something of the kind. The mulching can be thrown into the center of the rows, when you want to work the ground, and then raked back to the plants. Watering should be practised till the sets are confirmed. Keep the ground perfectly clear of weeds; in fruiting time give ashes and plenty of water. If you protect by mulching in winter, be careful not to "lay it on too thick" as it will smother the plants.

Hovey's Seedling is a good variety; and we believe Peabody's New Hautbois will prove as good as any other. The latter is a perfect plant in itself. If you get this you require no other. Hovey's Seedling is a pistillate, and if the old doctrine of a sexual distinction in strawberries be true, it requires that some staminate variety be cultivated, in the border, but not on the same bed.

Think that you can have a strawberry plot, that will pay for the labor required, in sales at the nearest market, and give your family as much of this dainty food as they can eat, (no quantity will hurt them, as with luxuries,) *and you CAN.*

Care of Sheep.

We see it highly recommended in many of the agricultural journals to pare back the hoofs of sheep to prevent their becoming lame; also to keep them as much as may be from wet grounds at this season, to keep off the foot rot; and to place tar in and about the salt trough to prevent their getting the maggots in the head. Presuming these directions to be correct, from the source from which come, we repeat them, though we have but little experience in the matter. Sheep are the natural riches of man. What a pity that we have no more of that species of wealth in this country. No as intelligent people as we are have so few sheep. Our profound belief is, that the produce of this useful animal should be protected measurably against foreign competition in favor of the American farmer. We believe also that those articles which are wrought with great labor, as iron, should

be protected, not alone for the sake of the manufacturer, but mainly for the farmer's benefit, that he may have the feeding of the laborer—a home market, where he can get the worth of his produce, and not have half or two-thirds of its value go to the speculator, the carrier and the middle man. But let that pass. If we err, we err honestly. We wish there were ten sheep in our country where there is one. If the dogs were dead and the government alive—to the interest of the American farmer—there would be. But look to what sheep you have. If there is any profit in keeping sheep, in spite of dogs and politics, it is in taking good care of them. See our article "Jerseyman's Notion."

Weeds, Thistles, &c.

Look out this month for the weeds, thistles and the like, not to let them sow broadcast for a future crop. They will do mischief to your neighbors as well as yourself. If you were doing something that would benefit yourself and the whole neighborhood we should rather see it. It is so when any one drains a foul swamp. The people all around are healthier, more efficient, and live longer. So if you make your farm shine in every part, and produce well, it actually increases the value of your neighbors' farms, for all the world sees the capability of that land. But we can not say as much for him who fills the autumnal breezes with the downy seed of the thistle.

Fruit Trees.

Now is the time to look after the fruit trees, especially those lately set. Cut off the suckers, that the sap may go to promote the growth of those parts which by-and-by will constitute the tree. Notice where shoots are springing out in such a direction that, as they grow, they will be too thick and in each others way, and cut them off before they use up any more of the sap. The cutting off of small shoots is safe at any time of the year. The cutting of large ones is

always dangerous to the soundness and health of the tree. If we wanted to use an Irish bull, we would say cut off all the large limbs while they are yet small, and then you will never have to endanger the tree by cutting large ones. What we mean is this;—look at a tree; imagine it all at once to grow ten times as large as now; would not the limbs run together, cross each other, tangle up, form a thicket? Well, then, with a little forecast you can see where they are threatening to do this, and prevent by cutting out certain shoots in time. If a hen hawk moved as deliberately and as straight forward as an apple tree limb grows, we would shoot him before he stole the hens and not afterwards. A good trimmer of trees will cut off the large limbs while they are *small*. If you will trim your trees rightly from the first you will seldom need a larger implement than you can carry in your vest pocket.

The Farm Stock.

See that they have plenty of fresh water. Working teams in this hot weather, should be watered four or five times a day. Let there be salt always in the pasture. The cattle are the only judges how much they need. Give them just what they will eat. This is a perfectly safe rule, except in cases where they have long been deprived of salt. It is specially important that milk cows have the opportunity to lick a little salt every day. The dairy woman salts the curd by rule. Now if you salt your cows once in ten days, and give no salt in the interval, she will not make an allowance for that; for she goes upon the principle that all milk is equally salt, when it comes under her hand; and a consequence will be to break up the uniformity of her dairy. The cheeses made the next day after salting, will be hard and dry; those made just before salting will be soft, inclining to be strong, will require a swathe, and will be hard to cure at best. Cheese making cows

should eat a little salt every day, and never much, and this is just what they will do, if you leave it to them.

Root Crops.

Now is the time to thin out your turnips. Let them have room to spread, and they will do so without the aid of steel or ratan. A sensible man never swells, but a turnip spreads, if you prepare the ground well, and will give it room. We suppose you do not want turnips, which

Stretch their roots with ease,
Clear through to our antipodes;
And Chinese rogues, if fame say true,
To rob our farmers pull them through,

but would rather harvest those that spread out on the surface, the bulbs so much larger than the tap-root, that the swarthy chaps down there, with two little eyes on the outer and upper corner of a flat face, could not pull them through so very easily.

The Manure Heap.

There are enough in Boston, New-York, Philadelphia, and so on, who would be willing to sell all the manure you want; and when they come to the conclusion to give you a fair chop of the profits, it will be a good thing for them and you. At present you will do well to make as much as you can at home. A very large quantity can be prepared from the sink wash, if you mix with it as much peat, leaf-mold, scrapings from hedge rows, or even pure loam, as it will saturate. The sink washings, rightly managed, are worth as much each year as a ton of Peruvian guano, but the cost of preserving them is not a quarter as much as the guano. In this month and next, as other work permits, is the best time to lay in for a large quantity of manure next spring. Peruvian guano is good, but it is too costly for most kinds of farming. This giving three cents a pound for manure and selling wheat for one, is rather dubious, to say the least. And then the thousand and one cheaper guanoses are of very doubtful character. If the farmer makes

the most of the home fertilizers, he knows what they are. Remember that the year's manure of the barn and pens may be doubled in quantity, without deteriorating its quality, if you add the right materials at the right time. Our back numbers have explained this fully. Do not forget to seize a dry time for getting out plenty of swamp muck. It is good for nothing raw, but valuable cured in the sun and air, and set into active fermentation by proper admixtures. See our article on that subject.

A Little of Everything.

The boys should have some holidays after harvest. We suppose they love work, and that they feel a deep interest in everything that relates to the farm and the home. In the bosom of a good boy, it is all "ours;" and yet it is not *ours* in exactly the same sense as with the father and the mother. Our own recollections are, that after harvest we loved to have some play days, to gun and fish, and rove among the freshness of nature; to take in our sisters and go and see the cousins. If we would train our children rightly, we must remember how we felt when we were children and at the same time exercise the judgment of riper years. There is no use in barking at innocent pleasures, that with us are no more. Our children will find out that we loved them once, and that we had them too, and they will think that they may. Within just limits, the more we allow them in harmless pleasures, the less likely they will be to rush into those that are hurtful.

The school must have been lost sight of pretty much for the last month or two. It will be well now to renew your acquaintance with it; to let the children see that you regard their studies as of the first importance; and to sympathize with, to aid and encourage the teachers. They are making up the second edition of yourself, the only edition that will be long extant. Cheer them in their work.

Have cooling shade trees thrown their

arms over and around you, these hot months, as you have come, weary and faint, from the field, and thanked you, yes, and paid you, for setting them there? and have you found your better half, or equal, (we won't quarrel which,) enjoying the coolness of a house protected by them? If not, be thinking what trees you will set, and where, when the middle of September comes. How strange that all should love trees, and yet so many should live in houses, heated to suffocation in summer, and all but blown away in winter, for the want of them.

The Siberian crab-apple, originally brought from Siberia, but now cultivated in many varieties, as the Large Yellow, Large Red, the Double Flowering Chinese, the White Currant, the Purple and Striped, is a beautiful tree to adorn a country dwelling. Its fruit hangs in clusters; and it is highly valuable for preserves. Being a hardy tree, and a great bearer, it often furnishes fruit for this purpose, when other sources fail. It would be well for every farmer to have a few about his premises, both for utility and ornament, and we might add, comfort, for it grows to a good size, and if near a building, in good soil, will grow to a very respectable height. One that we have in our mind, though but twelve or fourteen years old, towers above the ridge of a two-story house, and is really a pretty and rather stately tree.

We stop here, not because there are not other things we would like to say, though we have, perhaps, said too much.

IS SORGHO A HUMBUG OR NOT?

S. DANVERS, July 5, 1858.

FRIEND NASH:—While the crackers of freedom and the shouts of the boys are filling the air with gladness, in obedience to the prophecy of the elder Adams, (83 years gone by,) I take my pen in hand to acknowledge the receipt of your welcome Magazine for July. As

I have nothing new about Yankee stock to communicate, and as you have disposed of the Jerseys entirely to my liking, notwithstanding my special admiration of Mr. Fay's beautiful heifer, I thought I would remind you, of the *rap over the knuckles* that you gave me the last year, because I doubted the value of the Chinese Sugar cane, as a sugar making plant, in this region.

It is now nearly time for it to be seen, though I have not yet seen any of it the present season. Most of those who grew it here at the North, were satisfied with one year's experiment. No sugar, to my knowledge, was made from it this side of Philadelphia. My friends, Hon. D. Choate, of Essex, and S. Lake, of Topsfield, squeezed from it some ordinary juice, which demanded all the perseverance of an enthusiast to swallow, as compared with good molasses. As to its being of equal value to Indian corn, for the feed of stock, I have no belief. Those who grew it the last year, tell me it was not much admired by their stock. They would pull it over, and leave the greater part of it to be thrown away, if they could get anything else to satisfy their appetite.

I am aware that I run much hazard, in thus writing, to one so fully committed in favor of its culture, as yourself. Nevertheless, as I have always found you more devoted to the truth than any favorite theory, I venture to ask what you have seen and know of the prospects of the *Sorgho*, this season of 1858. I hope you will abuse me as little as you consistently can, because I know so little and doubt so much.

Ever truly yours, J. W. P.

We are not so strongly committed as our friend seems to think. Dr. San Grado, or some other Dr., (who was it?) had written a book, and it was hard for him to leave off bleeding people to death, after he had recommended it, but we have written nothing that can be thrust in our face disadvantageously, even

if the sorgho should prove worthless in Massachusetts, and far south of that State. We were, and are still, pretty well satisfied, that the sorgho will prove valuable to portions of the country; and if to some portions directly, then indirectly to all other portions; for we hold it as an axiom, that what benefits one part of a country, bound together by such ties as ours, benefits the whole.

In this respect, we experience a benefit, a heartfelt pleasure, in our residence here in New-York. True, it is an ugly place just now, hot as tophet, the yellow fever not a thousand miles hence, our best citizens cooling off in the charming country. But think of it, friend P.—a man, if he is a man, can not live in this commercial center, looking out, as it does upon the whole country, without feeling that every part of that country is his country, and rejoicing in the prosperity of every part.

If the sorgho shall turn out to be an improvement upon the old sugar cane for the far south only we shall rejoice in it. The farther north its utility extends the better. We have never been confident, that it would extend as far north as Pennsylvania, much less that it would reach Massachusetts. Still we are not yet without some hope that it may. The fact that two or three men, without the requisite appliances, with little practical knowledge of the subject, and in a bad season, failed to make the best of sugar, proves nothing. Try again, and try everywhere. The isothermal line for its northern boundary will be discovered. North of that it will harm nobody. South of it, sugar will be produced; and the quality will be good beyond all doubt. We have seen as good sugar and as fine syrup from the sorgho, as from any other plant, except the rock maple. May our correspondent always have as good to sweeten his tea and coffee and Buckwheats with, and for long years may his shadow be no less.

As to the cattle loving sorgho, there

is a word to say on the other side. We have seen cows giving it a marked preference over green corn stalks. Now that Indian corn is a first-rate soiling plant, so good, that it is doubtful whether the world can furnish its equal, is well settled. But we have seen cows drop it, as they would a hot potato, for the sorgho stalks, and then masticate them, top, middle, butts and joints, with a zest, most distinctly marked, utterly refusing the corn stalks, as long as a particle of the sorgho was in sight. It seemed to spoil their appetite for corn stalks as quickly as custards and sweetmeats do that of a spoilt child for bread and milk.

One observation, however, proves nothing. The sorgho may have been at that time in a peculiarly sweet condition, and one week after, or one before, the same animals might have preferred the corn stalks. The sorgho is not yet sufficiently tested; either as regards the sugar-making properties, its value for soiling, or its proper localities. In a year or two, we shall see what we shall see.

In the meantime, we advise no man in New-England, or any where else, to plant so many acres of it as to ruin him, if it fails. But to give it a fair trial without much risk shows enterprise with conservativeness, a union which we always like to see.—Ed.

PASTURES FOR BUTTER.

THE cow is a manufacturer. Her office is to convert the food she is supplied with into milk. The dairy woman carries on the process till the milk becomes butter and cheese, together with buttermilk and whey for the pigs.

On the character of the raw material, which is the soil, for out of that springs the grass, depends very much the quality of the manufactured article. We do not mean to say that all cows will manufacture equally good milk from the same pasture, nor that all dairy women

will make equally good butter and cheese from the same milk, nor that all farmers will manufacture pork equally well from the same buttermilk and whey. Still, much depends upon the pasture.

A pasture, to be good for butter making, should give timothy, June grass, white clover, red top, and others; should present a dense, thick turf; have good, soft water, and here and there a shade tree, and should be hilly or rolling. It is not easy to improve old, rough, hilly pastures, so as to keep up their quality for dairy purposes. Still, something may be done by the application of plaster, bone dust, ashes and fish, wherever these can be had. Fish guano, now being manufactured in Connecticut and on Long Island, would be just the thing for dairy pastures, if it does not come too high—thirty to thirty-five dollars a ton, we believe.

It would be well to institute careful experiments with this guano, since our Atlantic coast furnishes vast quantities of fish, and would allow of the manufacture of fish guano to a large extent, should it be found to pay both the manufacturer and the farmer. The oil, it is said, goes far towards paying the manufacturer; and if so, the time may come when the guano can be afforded at a low figure.

Since writing the above, it has come to our knowledge that a company called the National Fertilizing Company, Joseph C. Canning, Agent, 37 Fulton street, N. Y., have an establishment at the Highlands, on the coast of New-Jersey, for the manufacture of a manure from green sand marl, ground bones, fish, and other materials to retain the ammonia, and to convert the bone phosphate into a soluble phosphate. Having an inexhaustible supply of the green sand marl, which in itself is one of the best fertilizers in the world, they have the power to do a good thing for themselves and for the farmer, if they will take a lib-

eral view of the subject. Whether, like too many other fertilizing companies, they will care all for fertilizing their own coffers, and nothing for the land or its owners, is more than we know. Mr. Canning, we judge, is a fair-minded, liberal gentlemen, and we advise our friends to call on or write him. He will give information by circular or otherwise, stating materials, manner of compounding, analysis, price, etc. One thing is certain;—this Company can, if they choose, give an excellent article of manure, at such a figure that farmers can afford to use it freely, even to spread it on their old cow pasture, and make money by it, instead of having, as too often happens, all the work, while the manure vender gets all the money.

It would seem to us that the time has come, in New-England, and perhaps in some other regions, when the roughest portions of the pastures should be turned over to the growing of timber and fuel, and the more feasible be so improved as to produce more than the whole have done of late years.

Would it pay to scratch over the old hill sides with a harrow, (we mean those too steep and rough to plow,) and scatter on grass seed and a little manure?

We do not know; but this is a question for farmers to think of.—Ed.]

IS THE DISCOVERY MADE?

A very intelligent reader of our Magazine sends us the following, which like everything that can possibly throw light on so dark yet important a subject, is worthy of consideration. We publish it with pleasure, together with his suggestions, but with the single query, whether the soaking seed potatoes 12 hours in lime water would not injure their vitality. We are not sure, but should fear it.—Ed.

Ed. Farmers' Magazine—Sir: The following, cut from the *Evening Post*, first published in the *Buffalo Commercial*, is worthy of earnest investigation. The

composition of salt, lime, ashes, and plaster, which you recommend as a hill dressing when potatoes are planted, is just the article to kill the eggs which produce the insect that destroys the potatoes. Peruvian guano and flowers of sulphur added, will contribute much to the destructive properties of your composition; the potato rot, and the grape malady, are evidently a disease produced by a small insect that goes up and down in the earth to eat up vegetation. The animals that prey on vegetation in the ground are myriads, instead of legions. Whatever will destroy the vitality of a hen's egg, will kill the eggs of the *Phytocoris*. Potatoes should be soaked in lime water 12 hours before planting, and then house ashes put on them till they become dry. Thus planted, no eggs can be found with vitality on the potato.

PILGRIM.

The Potato Rot—Its Cause and Cure— Mr. Henderson's Discoveries.

Ever since the disease known as potato rot first appeared, various hypotheses have been offered as to its cause and cure. A malady attacking an esculent so important and forming so large a portion of our daily food, was at once recognized as a national disaster, and the researches of scientific men were directed to its study. Up to the present time no satisfactory theory has been promulgated. In giving publicity to that which we are now about to notice, we shall confine ourselves mostly to what has been done by actual experiment, and to the legitimate conclusions which inductive reasoning from those experiments affords. Our personal knowledge is confined to the following facts:

On the morning of the 24th of June, Mr. Alexander Henderson, of this city, left at our office a glass jar containing a sound and healthy potato plant, covered in by a perforated paper so as to afford air. He had placed it there at 7 A. M., and with it were confined some six or eight insects, which Mr. H. believes to be the source of the potato rot. The insect itself we can not describe scientifically. It is about half the size of the common house fly, of a brownish color, has six legs, two pairs of light diaphan-

ous wings, two antennæ, and a long, strong proboscis. Mr. H. thinks it is the *Phytocoris*, but is not positive as to that. At the end of twenty-four hours the plant was evidently diseased. The insect was actively engaged upon its various portions, which became brown and mouldy in the leaf, while the stalks in the course of two or three days suffered a putrescent change, until, on the 28th, some of them fell over by their own weight, the stalk being swollen and softened in some places quite to a jelly of a sickly green color. This process, Mr. Henderson informs us, takes place uniformly, but most rapidly when the plant is freely watered and exposed to the sun and air, as the specimen described was not. To all external appearance the disease was identical with the ordinary potato rot as it attacks the vines. Some pieces of early (this year's) potatoes, placed in the jar were also plainly attacked by the rot during the four days of exposure.

Mr. Henderson states that he has been engaged in this research since 1845; and in 1850 he discovered the bug on the vines, but thought it was confined to them. During the last year he has found it on the tubers, and watched its effects upon them. It appears on the vines in from two and a half to three months after planting, according to soil and manure, a richly manured soil producing the perfect insect sooner.

The natural history of the insect begins with the development of the egg, this is invisible to the naked eye, but can be seen with the aid of a lens, agglutinated to the skin of the potato. It is of an oblong form, and is planted with the seed potato. The egg may be hatched in six days in a warm, moist place. The entire period of development is not settled. Mr. H. exposed a plant to the insect, under proper precautions, and from the time of the exposure to the time the young insect of the next generation obtained his wings, was three months. The process of reproduction has been ingeniously watched by Mr. Henderson. The egg planted with the seed potato is hatched, and the young insect stays in the ground until he gets wings. In the meantime he is engaged in stinging the tubers, each perforation poisoning the root and begetting the rot. While yet in the ground, and as early as the tenth day of existence, the young

insects cohabit, and from the great rapidity with which they propagate, Mr. H. argues that the egg is deposited before the first emergence from the ground, although in case of cold, wet weather, the insect sometimes leaves the vines and returns to the tuber. Only a few days are required for the entire destruction of the vine. The insect is remarkably industrious, but the destruction of the vines does not affect the tuber except to stop its growth.

Mr. Henderson finds a ready explanation for the greater healthfulness of the potato in sandy soil. He finds that the grains of sand greatly annoy and cripple the insect, and as the light soil is heaved up by the growth of the root, the sand impacts or falls down, preventing the access of the fly. In a stiff soil the insect readily leaves the ground through the cracks opened by the growth of the tuber, and having stung it comes to the surface and attacks the vine, especially after heavy showers. During the past winter Mr. Henderson has had thousands of the young insect hatched under glass, and to try their power of mischief has experimented with bugs only a quarter grown. The plants exposed showed unmistakable signs of disease on the fourth day.

These statements we regard as important. So much is evident. Mr. Henderson, by means of this insect, produces potato rot at will. When a healthy plant is shown us, the insect applied, and the rot follows in four days with unerring certainty, there is good reason to suppose that the problem has been solved.

As to cure, Mr. Henderson thinks there is no serious difficulty. If we put a stop to the planting of the egg with the seed potato, we stop the propagation of the insect. The egg being invisible, any means applied should be thorough, and reach the whole surface of the root. Mr. Henderson states that by sprinkling quicklime over the potato as it is cut for planting, the moisture will dissolve the lime and bathe the tubers in a caustic alkali which will destroy the egg. At this time of the year the ravages of the insect may be prevented by packing the earth around the tuber firmly with the foot, which will smother the insect. We may add that it is probably the same insect which has recently attacked the grape vine.

Since writing the above, we have found

one of the insects in our jar, which had deserted the now rotten vines, at work underground upon a sound young potato.

For the Am. Farmers' Magazine.

NEAR BROWNSBURG, Rockbridge Co., Va., }
July 6th, 1858. }

ED. FARMERS' MAGAZINE:

DEAR SIR:—I seat myself to acknowledge the receipt of your welcome Magazine for July, which reached me yesterday. I regret that I have nothing interesting to give you in return. From the most flattering prospects for an abundant wheat harvest in May, I am sorry to say many of our wheat fields are almost a failure, particularly of the white wheat, which I presume is attributable to the wet weather of the last two months. While we have not suffered from floods, as has been the case in many parts of the Union, we have had continued rain. From the fine appearance of the waving grain up to the time of cutting wheat, we were flattered with heavy crops. We now find plenty of straw, but very inferior and light wheat, totally unfit for a fine article of flour. The berry is small and shrivelled, and will not weigh over fifty to fifty-five lbs. per bushel.

I was yesterday at our county court, where I made inquiry of many persons in a circuit of ten to fifteen miles around, and whilst I heard of some few good fields of wheat, the general intelligence was, that not over half crops would be made, and that of inferior quality.

The red wheats, and particularly the bearded Mediterranean, has done best this year, with such other varieties as ripened early. In May we anticipated an early harvest. In the latter part of that month, the fly or wheat midge seriously affected many crops, and much of the crop is straw broken and scarcely worth cutting, and the straw almost worthless from red rust. The late sown oats are also rusted, and will be a poor crop. Rye is better. Straw clean, and

grain good. The grass crop is very abundant, and if it can be safely housed, will pay well.

It is yet too soon to speak of the corn crop. The stalk is rather spindling, but a good season will give fine crops.

The fruit crop is abundant, and to such as can manage it well, will be a source of profit; but we Virginians have not heretofore turned these little things to good account. There is, by the way, I think, a good time coming. More attention has been paid to setting out orchards of select varieties, particularly of the apple. For fall and winter varieties, among the best are the Seek-no-Further, Rambo, Fall Cheese, Fall Pippin, Spitzenburg, Baldwin, Robinson's Superb, Alexander, Rolls' Jannets, Wine Sop, Lady Apple, Nonpareil, Brooks, Albermarle, and other pippins, and many other fine varieties might be enumerated. These do well in the South. Southern orchardists should, as a general thing, patronize nurseries at the South, as many of our finest varieties are native seedlings, yet I have noticed some very fine fruit here from Prince's nurseries, near New-York city.

And now, my dear sir, by way of closing, I would observe, I live on a poor farm, (there are fine lands in my vicinity,) which has needed much nursing. I would say to those about to engage in our honorable occupation, buy good land if you can, and if you can't purchase good land, what you cultivate make good. Good land, with good management, always has something to sell, be the prices high or low. On the other hand, when poor lands yield a good crop, they almost invariably come into a glutted market, when prices rule low. Again, it is easier to cultivate an acre of good land than the same amount of thin soil, when, with the same labor, the one will pay four-fold more than the other. Let the horses, mules or oxen be kept in good condition, that your soil may be well broken up, and properly

cultivated. All stock on the farm pay best to be kept in fine growing condition. The master's eye should be constantly directed to these things, none other feels the same interest that he does, or should feel. See that your laborers have well-ventilated sleeping-apartments, that their diets are wholesome and nutritious, that their tools are in good order. Then you may reasonably calculate on having your work cheerfully done.

Yours, etc.,

HENRY B. JONES.

P. S.—After closing my letter, in looking over your Miscellaneous articles, I see you speak of the "Sabbath-school" as a labor of love, piety, goodness, patriotism, etc. Now let me tell you;—We have a Sunday-school; we have had it over thirty years. It is at a country church, situated in the primitive forest. Our church will seat near 1000 persons. Every Sabbath during summer we have Sabbath-school in the morning. I will give you my notes for two past Sabbaths.

"*New-Providence, June 27th.*—Time, morning; present, 123 white scholars, 13 teachers; 105 colored scholars, 13 teachers.

"*July 4th.*—Very warm. There was present this morning 100 white scholars and 99 colored, with 29 teachers."

Now, my dear sir, colored Sabbath-school scholars are our negroes, old, young, and middle-aged, who congregate at our church from Sabbath to Sabbath to be instructed in God's Word. They are generally taught by the heads of families of good standing. My wife has a class. I superintend the whole.

Many of those scholars come from two to five miles. The colored scholars are instructed during the week generally by their young masters and mistresses, or some of the old servants who have been taught to read.

H. B. J.

That is as it should be. All honor to

the men and women whose labor is to dispel ignorance and to cultivate the mind and the heart. Knowledge is good, but it is a terrible power where no moral goodness accompanies.

If we were going to construct an agricultural discourse, we would quite agree with this writer;—Buy good land if you can, but if you can't *buy* good land, what you cultivate *make* good. That is the true doctrine. *What you cultivate MAKE good.* This should be our text, and we would stick to it. But Mr. Jones has said just about the right thing, and we are saved the trouble of constructing such a discourse just now. —Ed.

CULTIVATION OF GRASSES.

BY L. DURAND.

THE following is an article of standing value on the important subject of which it treats; and we copy it for the benefit of our readers, though it may seem somewhat out of place in this August number. With regard to the cutting a portion of grass before it is in a fit state, that the rest may not be delayed too long, we have our doubts at least; and we have elsewhere expressed the opinion that the state of the field crops will be well looked to by the sensible farmer, before he leaves them, to cut his grass prematurely.—Ed.

Foremost among valuable farm crops, is grass; a staple crop as it were, when compared with other vegetation. To the farmer it is of inestimable importance to secure his lands to grass, at least a goodly proportion of his domain. In fact, the foundation of all successful tillage lies at this point, namely: "Does your farm produce all the valuable, natural, and exotic grasses well;" if the response be affirmative, you may muster with tillers who have the right to be considered good cultivators, or at least you may indulge in the gratifying unction that your neighbors envy you the possession of a superior farm.

Next to the farmer, who is befriended by green meadows, and uplands waving with miniature seas of timothy, is the

rural gentleman who delights in a velvety lawn spread around his house in all its refreshing greenness and glistening brilliancy. To attain this is not in all cases an easy matter. The difficulty experienced by the amateur, is an inadequate knowledge of the different varieties of grass, and their adaptability to different soils. I shall therefore give the names and description of those kinds with which I am practically acquainted.

Timothy or Herd's grass, (*Phleum Pratense*) is one of the most valuable of all the cultivated kinds; it is of foreign origin, but adapts itself to American soil like one to the "manor born." In England twenty-nine tons of this grass have been cut from six acres of ground; and such astonishing yields are doubtless owing to high cultivation and a propitious climate. In this country it is made use of to an almost unlimited extent for market hay, as it possesses a large per cent. of nutriment when dry. This fact, however, does not prove it the best; for not unfrequently it is spoiled in making in hay, while in the field; it being very sensible of any extraneous influence. When this grass is put in the ground alone, it often grows coarse, with large stalks, particularly the season subsequent to seeding. This rankness of growth, of course, tends to depreciate the quality of the grass for fodder. In order to avoid this error (for it is an error) the seed should be put in very thick, with a generous proportion of red-top, (*Agrostis vulgaris*.) The result will be a fine, tender grass, plethoric, with nourishing juice, and affording excellent pasturage and a velvety lawn.

When timothy is sown alone (a plan which I would not recommend) on ground which has been previously well stimulated with manure, the quantity of seed demanded will be about one bushel and a half per acre. In case the soil is only in indifferent condition, two bushels per acre will be none too much. A better market hay, however, can be produced by sowing one bushel of red-top to half a bushel or three pecks of timothy per acre. Oftentimes one bushel of seed will be as effectual in seeding an acre of land as two bushels on other occasions. Notwithstanding this singularity, thick seeding is at all times advisable, whether for pasture or lawn purposes, as in unpropitious years much seed never vegetates. Clover is also essential to good

pasture. In case land has been previously planted to such crops as require much animal manure, it will not be necessary to put in any clover seed, as a sufficient quantity will be found growing spontaneously with the timothy the first season. The second season timothy and red-top will displace the clover. Timothy grass, as a general rule, grows but once in a season, although in low swales, if the weather be favorable, it will, after being cut, afford good early fall feed for cattle.

Red-top in some sections of the country, is considered the very best grass for feed. Entirely alone it makes excellent fodder for stock; horses, however, prefer a mixture of timothy.

Red-top forms a close, tight sward for the lawn, and most effectually shuts out weeds of almost every description. It will also grow and flourish well on a much lighter soil than timothy, remaining in the meadow and growing a good crop of grass, long after the timothy has become a reminiscence. There appears to be two kinds of red-tops, one sort that is peculiar to the west of the upland pastures of New-England, and grows about twelve inches high, with a small slender stalk and a short fuzzy top. The other kind, the red-top proper, grows from fifteen inches to two feet with a long slender head as a top and a stalk in proportion. The small red-top, may be as nutritious as the larger kind; it certainly makes a good grass for cattle when fed down, and not permitted to run into flower and seed before the animals are "turned in."

Red clover, we think, is entitled to be called a grass, although some claim that it is not a grass proper; then call it a grass improper. A late writer in the *American Agriculturist*, called Indian corn one of the grasses. If this be the case, I think there need be no question but that clover may be recognized by a similar distinction.

Red clover for pasture, is the most economical use to which it can be devoted. It is also valuable as a soiler turned under when green. The amount of feed that red clover will yield in a season, is almost incredible. After it has thoroughly "headed out" "turn in" stock enough to feed it down in the shortest time, in which case it will continue to grow fresh feed during the remainder of the season. It is a biennial.

White clover is another excellent

grass of the kind. It forms a thick, bushy bottom, spreading rapidly over the surface, and forms a much tighter sward than the variety just described. Generally it will spontaneously appear in newly seeded meadows. In order to make it into hay, it should be cut while in blossom, otherwise it wastes in drying, losing its nourishing properties by exhalation.

Orchard grass—one of the great advantages of this grass is, that it will grow very early in the season, and thus affords a good bite for the cattle by the tenth or fifteenth of May. On this account it is also valuable for the lawn purposes, giving a delicate verdure to the landscape before vegetation has assumed its summer garb. By the middle of June it is ready for the scythe. One great advantage attending the cultivation of Orchard grass is its adaptability for growing beneath the shade of trees without any apparent diminution of vigor or quantity, to that grown in open exposure, hence in characteristic name, orchard grass. There is, however, one drawback attending this variety. Difficulty is experienced in unfavorable seasons in making the seed "catch," therefore, it becomes imperative to perform the seeding with a liberal hand. Clover and orchard grass should be sown together as they arrive simultaneously at cutting condition. I believe it is the rule among English cultivators, to sow eight or ten different varieties of seed together for mowing lands, but in this part of the world the advantage of such a promiscuous crop is not apparent; two or three kinds is quite sufficient, say red-top, timothy, red and white clover, in generous quantities, will answer. What the soil requires is to be thoroughly swarded over to grass by the second season of mowing, rooting out all weeds and foul vegetation. Thick seeding will invariably give a finer and better quality of grass for hay, and will also continue to grow good crops much longer than when the seed is stingily scattered.

Sweet scented vernal grass, is frequently found growing natural in meadows, and by the way side; it exhales a delightful perfume of an aromatic character. It is a good pasture grass, but for hay its qualities are not altogether desirable; it continues to flourish during the entire season of vegetation.

Kentucky blue grass is not known

among the northern farmers to the extent its merit deserves. It makes a heavy grass and hearty food for animals. There is a variety of blue grass, peculiar to the pasture lands of New-England, in appearance and quality slightly favoring its Kentucky neighbor. I should particularly recommend the Kentucky blue grass for trial among the farmers generally, in order to correctly ascertain its qualifications for enduring and flourishing in the more extreme latitudes: it has already been proven invaluable for lawn purposes on account of its capability for enduring drouths, and also because it gives a delicate velvety appearance.

In an article of this character, I can only glance at a few varieties. Those I have mentioned are kinds in ordinary use, and are sufficient for practical purposes, whether for feed or rural embellishment. A large list of grasses, illustrated by appropriate engravings, may be found in the *Gardeners' and Farmers' Dictionary*.

The proper time for seeding lands to grass, in this section, is generally in the spring with oats, or spring wheat, or barley. Oats, however, have the preference; the only objection, to which, is, when they grow too heavy and rank, they are apt to lodge, and the young grass is smothered and killed out. Barley and spring wheat are not so objectionable on this account, but for some reason, grass seed with the latter crops do not catch well at all times.

Instances are recorded in which success the most flattering has been realized by sowing grass seed with buckwheat, which gratifying result has also attended fall sowing with rye and winter wheat.

Some two years ago, I saw a meadow turned over in the month of August. The furrow was turned down evenly, and subsequently a top dressing of compost manure was applied, after which turnips and grass seed were harrowed in. The turnips came up well and gave a large yield. The grass seed also flourished beyond expectation, and last year delighted the owner with a luxuriant crop of red-top and timothy. This success is doubtless attributable to the propitious season. In an unfavorable year the experiment would, in all probability, be an utter failure, still I consider it a good plan to get an old meadow freshly seeded, where a course of other crops is not required.

The best varieties of grass for lawns, are Kentucky blue grass, red-top, timothy, white clover, and sweet scented grass. In localities occupied by trees, and the ground is much shaded, a proportion of orchard grass may be added. In the Oct. issue of the *Review*, I gave the formula of operations for creating a tight, smooth sward for the lawn, and I therefore may be excused from repeating it here.

Pasture lands, for feeding stock, are quite heterogenous in their character. The ordinary mountain lands are, and should be kept in permanent grass. Such lands generally afford a rich growth of natural grass which, when fed down, by sheep and cattle, may remain undisturbed by the plow for an indefinite period; all the attention the land requires is an occasional clearing up of shrubbery, and the application of a top-dressing of some specific fertilizer; this, with the excrement of the grazing herds, will be ample stimulus to keep up diminished vigor.

Open woodlands are often turned to profitable account, as besides affording provender for ruminating animals, they also give shelter, in stormy weather, or the intolerant heat in midsummer.

Such pasture lands as present no obstructions to the progress of the plow, should be brought into a course of crops, and so kept in a fertile condition, when a large amount of grass may be obtained from a comparatively small quantity of ground.

If the farmer has a great many acres to go over, and the work is to be done by hand, it will be essential to begin cutting quite early in order that the later mowing be not dried up, and the heart of the hay dissipated by the withering and absorbing influence of the atmosphere, but horse powers and patent mowers are now in such extensive use, that no intelligent farmer will attempt a large job without patronizing their superior facilities for accomplishing labor.

Early in June is uncertain and *risky*, as we seldom have more than one or two fair days at a time. Three or four acres of hay cut, a part lying in the winrow, and the balance in heaps, and in this situation "weather" a week of rain, is not just the thing for fodder; here the advantage of horse power machinery is apparent even to "fogies," who still pro-

test against these rapidly advancing innovations (as they term them) of science, and intellect, in their application to farm economy. In concluding my remarks, I would observe that the cultivation of grass is productive of large pecuniary results, and the beauty of a well kept lawn will not be spoken of disparagingly even by the most sordid disclaimer against the inutility of non-productive gardening. If it were not for the deep, almost perpetual verdure which bedecks rural England, she would not at the present time occupy so exalted a position in suburban matters. It is her green fields to which she owes those delightful cottages, which embosom her home loving people, and why do they cherish remembrances even to an advanced age, of the "cot" wherein they commenced the battle of life; simply for the reason that their homes were made Eden like, with grassy lawns, trailing ivy, fragrant flowers, delicious fruits, refreshing vistas of land and water, lowing herds, and vast forests; these combined, have done more for English rural life, and English education, than all the ermined law-makers. —*N. Y. Horticultural Review*.

SOMETHING IN FAVOR OF CROWS.

A CORRESPONDENT of the *N. Y. Tribune* says;—

For the interest of the farming portion of your readers, I communicate the following: Mr. Alpha Brown, an enterprising farmer of this town, informed me that, having acted this year upon the somewhat late suggestion of yours, of sowing corn broadcast over the planted ground, he experienced a new result. Upon four acres, where heretofore his crop had been greatly injured by the devastations of the "white grub" and "grey corn-worm," he sowed broadcast after planting, a half bushel of corn. This, of course, attracted the crows, which, coming to the ground in the cooler part of the afternoon and morning, found the worms on their usual visit to the surface, and, preferring the latter to the corn, devoured them instead. The result is, that out of the whole field he has not lost to exceed four or five hills.

Eaton, N. Y., July 12, 1858.

When a boy, we carried home many a bounty of 16 $\frac{1}{2}$ cts. each, from the town treasurer, for the slaughter of crows.

As now advised, we should vote in town meeting against the giving bounties on the heads of any birds, even the blackest. That birds in general should be encouraged is quite clear. Whether crows are an exception, we should be quite willing to leave with the farmer boys and their fathers to decide, very much suspecting that they would be killed fast enough without government aid.—Ed.

SHEEP—A JERSEYMAN'S NOTIONS.

In conversing with sheep growers, we have often heard the remark, that the bodies are of little consequence, that it is the wool for which sheep are kept; and the practice of many engaged in sheep culture would seem to confirm this view of the subject.

But is this a correct view? Grant that it may be good policy, in a national aspect, that some should aim at the very finest quality of wool, thereby to give our wool manufacturers, if by the way we should ever have any, a high reputation relatively with those of other nations. If the best quality of wool can be obtained from the very small races of sheep, it may, for aught that we know, be wise that that branch of the great business of sheep culture should be attended to. But it must have a limit. We should be sorry to have the great mass of the sheep kept in this country, of the puny liliputian races, even if the result should be that Prince Albert and his German cousins should send for their coats to this country, because they could not find as fine at home.

There is another branch of sheep culture more important. It is that of cultivating sheep, which give, if not the very finest wool, that which is the next-door neighbor to it; sheep that are large, hardy, producing a great crop of wool next to the best, and mutton that is worth carrying to market, weighing from 20 to 40 lbs. to the quarter, and giving mutton chops that a hungry man would not

starve upon. This branch of the business would seem to us to promise better results than any other.

There is still another branch of the business, one which we do not believe should be overlooked, that of growing sheep mainly for the meat, regarding the wool as quite a secondary thing. We have long believed that, with the best meat producing sheep, a ton of this kind of meat can be grown and fattened about as cheaply as of any other, and to the extent of the people's choice of it, as good as any other, as digestible, as health giving, and as strength giving. We have often for years put the question to practical farmers; Is it not so? Can you not grow a given amount of this meat as cheaply as any other? And never till recently have we obtained a satisfactory answer.

In conversing the other day with a New-Jersey farmer of great experience in this kind of husbandry, we found one man who came to our views. His sheep are of the Southdown breed. The wool is what would be called very good common wool, not exactly long wool, nor such wool as a gentleman of *fine cloth* would wish his coat to be made from, but well adapted to most domestic uses. The quantity produced by each sheep is large. But we were struck with the correspondence of his views with ours. His remark was, that you may as well have sheep of a pretty fair quality of wool, and the more wool and the finer the better, provided you get large carcasses; that he grew sheep for the meat; that he could save himself if he threw away the wool, and that whatever that brought was profit. In reply to the question, whether that species of meat cannot be produced just about as cheaply as any other, provided you keep the best sheep for that purpose, throwing the wool out altogether, he answered promptly, "yes."

Now we do not know that his view of the subject is correct. We have hardly ever found a practical farmer to agree

with him. But it has long seemed so to us; and with this view of the subject we consider it a matter of regret that sheep culture enters so little into our national industry; and we heartily wish we could see our pastures dotted over tenfold more, not only with the finest woolled sheep, and those whose wool is fine enough for any but the most fastidious, but with others, whose wool is nothing to brag of, but good enough for many useful purposes, kept as our friend, the Jersey farmer, said, mainly for the meat.

If the dogs, as we stated in a recent number, are the cause to considerable extent of the paucity of sheep, we should not much want to kill the dogs; but we should be disposed to cry *mad dog*, or as the honest Quaker is said to have done, to give them a bad name, till somebody else would kill them.

FRUITS AND NATIVE WINES.

ANOTHER interesting feature in the late exhibition was the collection of fruits and native wines. Of these latter there were more than fifty different samples, coming from various States, among which Ohio, Missouri, Pennsylvania, New-Jersey and California were the most prominent. The cultivation of the grape is becoming more and more extensive—every year adds new and valuable varieties of native grapes to our list, and such as are adapted to particular localities or to general cultivation. Ohio has vineyards to the amount of four thousand acres, Missouri one thousand acres. Other States have less quantity, while California bids fair to rival the vineyards of Europe.

It was formerly supposed that ours could never become a grape growing country, but this false theory is now entirely exploded. Thousands of cultivators are now sowing the seed of native or hybridized grapes, and we are constantly producing new and improved varieties adapted to all sections of our land. The time is not distant when we shall not only raise our own grapes and manufacture our own wines, but we shall also be exporters of these articles. Since the disease of the vine in Europe

has proved so disastrous, a demand has there arisen for the brandies made from our grapes, and of which, the last year, more than three thousand gallons were sold at five dollars the gallon, and sent to France to flavor French brandies manufactured from American rum and whisky.

Without entering here upon the question of temperance, I may add that many of the staunch advocates of that most worthy cause, encourage the cultivation of the grape for wines, in the belief that if pure wine becomes common, they will promote health by supplying the place of foreign poisons, now sold and consumed under the name of foreign wines, and that if the fruit of the vine comes into general use, it will reduce the demand for alcoholic stimulants. On these principles a distinguished physician, President of one of our most efficient State Temperance Societies, gave a recommendation to Mr. Longworth for his Catawba wines.—*Journal U. S. Ag. Soc.*

THE PATENT OFFICE.

In publishing the following letter, from the pen of David Landreth, an experienced cultivator of Bloomsdale, near Philadelphia, we disclaim all desire, or willingness even, to injure any individual connected with the Patent Office. But that the Agricultural Department connected with that Office has fallen into grave errors, seems to be the opinion of many. We know not why its doings should not be investigated by the people of these United States as well as those of any other department of the Government. Certainly, the powers given to that Department, Bureau, Basement, whatever it may be called, should be employed in a way to favor, not to retard, American industry. And yet by many it is believed that some of its measures have operated as a bounty on foreign seed growers and a tax on our own. We are not prepared to decide the question, whether it be really so, but we can see no reason why the subject should not be looked in the face; nor, if there have been errors, why they should not be corrected, even if some severity of

language and a degree of earnestness be necessary to inaugurate the correction.

—ED.

To Joseph Holt, Esq., Commissioner of Patents:

SIR:—The Washington *Union*, of recent date, contains what purports to be an official "Vindication of the Agricultural Division of the Patent Office," signed by yourself as the Commissioner, the greater part of which is a biography of your clerk, with whom the public has really but little to do, and cannot be presumed to know. He is simply your assistant, holding his position at your will, amenable to you alone for his acts of omission and commission, and it is hardly manly to screen yourself behind him. Nevertheless, as he seems willing to act the foil, there is no impropriety in examining his pretensions. Before proceeding further, however, allow me to say that I have no unkind feelings toward the person referred to. He may be amiable and diligent, but these qualities do not constitute all the requisites for an "agricultural clerk."

We are told in the biography to which you have affixed your signature, and to the accuracy of which you certify, that he has raised himself from a lowly position to that of a man of science, an engineer and author—high praise; and, if well merited, he should be held up as an example worthy of imitation. Of his engineering abilities we have no evidence except the biography itself, nor is it important to the present question; but it may be hoped it is better than the authorship, else the least said about it the better for his credit. You inform us he was for two years engaged in the preparation of his treatise on the "Trees of America," "making several journeys through Massachusetts, New-York, and other States, visiting gardens, nurseries, and celebrated trees, as well as dock-yards, manufactories and other places where timber is wrought, to obtain minute information for enriching this work," (the quoted words are your own,) and it is understood his appointment as clerk under your predecessor, was influenced in no slight degree by the book in question. It is not to be expected that the studies and train of thought which pointed out your predecessor, Judge Mason, and yourself, as suitable incumbents of the "Patent Office," should have embraced subjects as widely

separated from that office as they were from the office of Attorney General—hence, with every disposition to promote the public interest, you may have fallen into error, or been imposed upon by specious pretensions. It is evident you have been, or you never could have referred, in words of commendation, to so gross a literary theft as the book in question. This is not mere declamation lightly uttered, nor are you asked to accept the writer's unsupported statement. If you will refer to the first volume of the *Horticulturist*, you will find a review of this famous work, from the pen of the lamented Downing, whose judgment and integrity no one will question. Within the limits of a letter like the present, there is not room for extended extracts. One single sentence will convey Mr. Downing's opinion of the book. He says, in his own quiet way, "Would it not have been better and juster, therefore, to have called the work 'An Abridged compendium of Loudon's Arboretum,' (a British publication) than the Trees of America"—burning words, which might blister a rhinoceros. You are, sir, also invited to refer to *Silliman's Journal of Science and Art*, for a criticism of the book, which, in the language of Downing, "bears the initials of Gray, the Professor of Botany in Harvard University, and one of the authors of Torrey and Gray's Flora," accorded by every man of science in the country, "an authority of the highest rank on such subjects." Mr. Gray quaintly remarks, "with great propriety," "the author says he feels called upon to acknowledge his indebtedness to Mr. Loudon for a large share of his work." And again, that "Nowhere beyond Dr. Harris' own volume—Report on the Insects of Massachusetts Injurious to Vegetation—will so large an amount of his invaluable researches be found embodied." The reliability and accuracy of the portion of the book which *really belongs* to your clerk, may be judged of from his remarks on the sassafras tree. He says: "The most interesting historical recollections connected with the tree, is that it may be said to have led to the discovery of America, as it was its strong fragrance, *smelt by Columbus*, that encouraged him to persevere, when his crew were in a state of mutiny, and enabled him to convince them that the land was not far off." Lest, sir, you should think I am trifling, I give you

the page—417—though, upon second thought, that may be unnecessary, as you have so strongly commended the book, and may, possibly, be fully acquainted with it. On this “historical recollection” Dr. Gray observes: “Acute olfactories the great navigator must have had to snuff the fragrance of sassafras groves in Florida, more than five hundred miles off! Besides, *now-a-days* the flowers of sassafras are almost scentless.” Mr. Commissioner Holt, one may well be at a loss which most to be surprised at—the modesty of a man who, on the merits of such a work, claims public employment, or the folly of affixing an official certificate to the value of such a book. For the honor of the country, it may be hoped, sir, you will be, in future, more chary of that signature.

With a knowledge of the abuses which existed in the agricultural division of the Patent Office, a committee of the Pennsylvania Horticultural Society, one of the members its President, who had served his country at home and abroad, another one of the first pomologists of the Union, all gentlemen of eminence and acknowledged worth, addressed you, urging nothing to the injury of any one, but simply a correction of prevailing abuses; and they certainly had a right to expect for their communication respectful consideration, rather than the reply given to what you are pleased to term “certain allegations;” or as the *Union*, which comes to your defence, has it, “vague assaults, destitute of foundation.” These allegations were the comments of the press, in city and country, of several agricultural journals, and of scores of country gentlemen, who felt grieved at the prostitution of the name of agriculture; and indignant that the public funds, which might have been productive of so much good, had been squandered through presumptuous imbecility. The allegations were not vague; it was distinctly charged that the majority of the seeds distributed were either varieties which previous experience had proved to be of little or no value in this country, or of kinds though valuable, so common as to be obtainable by purchase in every country store. Some of the varieties thus distributed by you were specifically designated—besides roots and bulbs commonly sold by auction, and grafts of fruits, which might be had in every nursery in the

land. To such abuses was your attention respectfully invited, with the hope that the future might atone for the errors of the past; but from the tenor of your “vindication” it is to be feared a correction of the evil is not near at hand. We must be content to see the mails borne down by worthless *Choufas* or *nut-grass*, of which one of the species is the most pestiferous of southern weeds, and of which, I have been informed, over one hundred bushels have been sent out to infest the country. Have a care, sir, that this is not the most enduring memorial you may leave behind of the days when you were “Commissioner of Patents.”

The public are informed, in your “vindication,” that the operations of the agricultural department “have enhanced the comforts, wealth, and luxury of the people, that its efforts have created a *new field* of enterprise, and that, in consequence, more than two hundred seed stores have been established.” That it might have enhanced the wealth and comfort of the people, if properly administered, no one can question, but that it has done so in a degree at all commensurate with the means at its disposal, is denied on every hand, and I submit, the necessity for your “vindication” is in itself, proof undeniable of the fact. The claim of having created a “new enterprise,” and the establishment of two hundred seed stores, (how exact the number!) seems to have been thrown into your “vindication” as a diversion from the question at issue. Are we to be understood that seed selling is a “new enterprise,” and that the Patent Office supplied the “stock in trade” of these two hundred stores? If so, the parties who have embarked in it had better be advised in time, and seek other sources of supply, else they may gain an unenviable reputation, if indeed, they do not subject themselves to criminal prosecution for “obtaining money under false pretenses.”

Again, sir, you assert with the confident tone of one who cannot be in error, that “seeds of the Brassica tribe, such as cabbage, turnips, &c., grown in the cool, moist climates of the North of Europe, in the absence of the hot scorching suns, and numerous insects, which in other countries affect them, can be raised of a better quality than can be done in the older settled parts of the United States.” These are words uttered by

you, in your official capacity, in a document to be placed on record. I join issue with you on this statement, and I declare before the country, pledging whatever professional reputation I may have acquired, *it is untrue, in whole and in part*; and here permit me to introduce myself to you, and explain why a private citizen should address himself to you as an officer of the government. I am the descendant of him who, it is believed established the first seed shop (on a small scale, indeed) in America, and the first man remembered who, on American soil, raised seeds as a business pursuit. Until his day, the few seeds needed by our scanty population, were only obtainable irregularly, or were imported from abroad in an uncertain way. He struck out for himself an independent course; the public proved his seeds to be reliable, and the demand grew stronger than his ability to meet it. With his name his professional reputation was inherited by the writer, who addresses you from a tract of three hundred and seventy acres, cultivated in drilled crops expressly for seed—one of the largest establishments of this kind in the world. The seeds here produced are known in nearly every town and hamlet in the Union, (New-York and New-England excepted, were seeds of approved quality are extensively raised,) and are exported to the West Indies, South America, our own Pacific coast, and to the British possessions in India; to the latter tons have been exported at a single shipment. So indispensable are American grown seeds, and so greatly preferred to those which you have lauded, that the desolation which surrounds the inhabitants of India has not caused a cessation of orders, and a ship is now bearing towards them a supply of American seeds. Mr. Commissioner Holt, would it be discourteous in me to ask if, with such stated facts, which should be fully known to you, you are not greatly in error in permitting your office to decry the produce of your country? Is it not enough that all who are similarly engaged with myself should contend unprotected against foreign competition, and the competition of the Patent Office, with the public purse and the public mail at its command, but that you should proclaim in an official paper that which is absolutely unsupported by facts?

But to return to your declaration that

cabbage seed and turnip seed can be raised of better quality in Europe than in this country. The varieties of cabbage most in use in the United States are Flat Dutch and Drumhead—they are the sorts which furnish the main supply in winter, and from them is made the favorite sauer-kraut of our numerous German population; hence they are the varieties most in demand, and the present year's crop of the writer will reach several thousand pounds of seed. An occasional failure, by reason of severe winters, or other causes, has sometimes made it necessary to try the imported seed, rather than go wholly without. Under such circumstances, it has been had direct from England, Scotland, France and Germany, and in not one solitary instance which has come under the writer's notice, has a head of any value been produced.

This is no assertion made to meet this particular juncture. The fact was stated years ago in the *Rural Register*, and is so well known that no market gardener (the best authority,) from Maine to Texas, would depend upon imported seed of these varieties, if given by the Patent Office, free of cost and carriage. These are words deliberately uttered, and I appeal to every one of the business designated if they are not true in every particular. It is proper to add, they do not apply to the early varieties of cabbage, which, being planted early in the spring, head before our extreme heat. Again, as regards turnips; it is well known to every cultivator of experience that, with the exception of the Ruta Baga, (Swedish turnip,) the imported varieties are not so reliable as our own; there is a tendency in those raised from English and continental seed to be [technically] "leafy," and in some cases they do not produce bulbs at all. Even the Ruta Baga, from English seed, though usually pure, sometimes grow with an elongated crown—"necky"—besides, it must always, of necessity, be one year old when planted, whilst the American ripens in season for sowing the same year—a matter of importance at the South. An advertisement of a well known New-York seed house, now before me, quotes all varieties of American turnip and Ruta Baga seed at *fifty per cent higher than the imported*—certainly not because the foreign is better, as you so confidently declare.

At the December meeting, 1855, of

the Philadelphia Society for promoting agriculture, the writer exhibited a collection of turnips, raised from imported seed, for experimental purposes. Annexed is an extract from the minutes of that meeting:

"Mr. Landreth exhibited *fifty-two* specimens of turnips, raised from seed, imported by him, for trial, from England and the continent, including two or three varieties distributed by the Patent Office. The greater portion proved to be decidedly inferior to the old kinds raised in this country, while not a few were, according to our American ideas, unworthy of culture. Of the entire number there were but *two* varieties which Mr. Landreth designed to perpetuate.

ALFRED L. KENNEDY.

"Attest, Recording Secretary."

There is reason to suppose the major portion of the above varieties had merit *at home*. No country can grow finer turnips than England, where that root supplies the place, to a considerable extent, of our Indian corn, but the fact admits of no dispute *that English seed is of but little value when sown under an American sun*.

In connection with turnips, I may be permitted to advert to a fact alluded to by the committee of the Horticultural Society, in their appeal to you, but which you have entirely ignored in your "vindication," namely, that not only are you flooding the country with old and discarded varieties of seed, but are actually importing from England turnip seed of a variety which originated on my own grounds, which I specifically named, (adopted abroad,) and of which I distributed upwards of six thousand pounds, raised by myself last season.

Another, and really disgraceful, instance of the want of common information at Washington in regard to seeds, is exhibited in the fact that, in the tariff of 1847, "flaxseed" is subject to a duty of 20 per cent, and "linseed" to 10 per cent, and in the revised tariff the former is placed at 15 per cent, and the latter *free*. The public may perhaps be surprised that those who speak so confidently about seeds, and gratuitously instruct men in their profession, should not have discovered that *flaxseed* and *linseed* are the produce of the same plant, (*Linum usitatissimum*), and are, under all circumstances and from all places, naturally and commercially identically the same.

I am not ignorant of the outside pres-

sure brought to bear upon the operations of the Patent Office. In a conversation with Mr. Mason, just after he assumed the duties of the office, he censured, by implication, the acts of his immediate predecessor, and expressed his conviction that it was no part of the duty of the Government to scatter on every hand, free even of carriage, seeds which might be had from every country. It could not have been the intention of Congress, he argued, that the appropriation should be expended to save the pockets of the few, at the expense of the many, (for, when all is done, but a very small percentage of the whole, participate in what you strangely enough term in your "vindication" the "bounty of government," as if the farmers of America were paupers,) but rather that the funds should be exclusively devoted to obtaining from remote countries, such products as might not reach us through commercial or other channels. Sound doctrine, which none could controvert—such doctrine as was taught in the early days of the republic, when American labor met with just support, when the words "corruption in Congress," were not on every lip, and official plunder was a rarity. But the Judge soon found that garden seeds, however common, were demanded in unmeasured quantity, by members of Congress—claimed by them as perquisites of office, like "red tape," which covers a multitude of pickings. With what other view, it may be imagined they inquired, did they vote the appropriation; was it not a ready mode of making capital at home? Did not a few garden seeds, or a few flower seeds, or bulbs, to deck the parterres of their lady friends, insure them pleasant smiles on returning to their districts? The Judge, in spite of his opinion, yielded, dispatched his clerk to the London and Paris seed stores, to one of which, alone, a sum approaching thirty thousand dollars has already been paid for seeds which might have been had, of greater value to the country, at home!—but which the people should have been permitted to purchase for themselves, if they desired them. There can be no doubt that Judge Mason honestly intended to carry out his principles, but he yielded to evil influences, and you, sir, tread in his footsteps and share in the responsibility.

In conclusion, the writer trusts that, in what has been said, he has not lost sight of the respect which was due your

private worth or official station. He has spoken with the freedom of an American citizen, when criticising the acts of a public servant, but he disclaims alike political or personal ill-will. He has no ambition to serve, and has higher aims than mere pecuniary interest. For nearly forty years he has been an humble co-laborer in the promotion of American agriculture.

As one of the founders of the Pennsylvania Horticultural Society, and for a long period its Corresponding Secretary; as a working member and President of the Philadelphia Agricultural Society; as one of the Vice Presidents of the United States Agricultural Society, and an occasional contributor to journals devoted to rural affairs, he has labored, in a feeble way, to advance the cause. With others, he had hoped to see agriculture placed before the nation in the commanding position its pre-eminent interest gave it claim; but the day has been deferred by the acts of yourself and predecessors, when it may be expedient to enlarge the patronage and power of the "agricultural division," or to erect it into a distinct department.

DAVID LANDRETH.

Bloomsdale, near Philadelphia, June 21, 1858.

CHINESE SUGAR CANE.

DESIROUS of giving our readers the best means we can of judging of this plant, we copy from the Journal of the U. S. Ag. So. the following, from the address of its much esteemed Ex-President, Marshall P. Wilder. Whether all that is here affirmed is yet sufficiently proved, we are not certain. Our impression is strong that this plant will acclimate itself, and prove highly valuable to portions of the country. There will be a Northern line beyond which its cultivation will not be profitable. There may also be a Southern line beyond which other sugar-making plants will be preferable. Already there are indications that in Florida the West India canes are preferred. To ascertain its boundaries, may be the work of years.—Ed.

One of the most important articles on exhibition at our late Show, was the syrup of the new Chinese sugar cane,

(*sorghum saccharatum*.) the introduction of which into the United States has excited more deep and general interest than any other agricultural product within the last quarter of a century, and scarcely less in importance than Indian corn. The samples of this article were presented by Col. Richard Peters, of Atlanta, Georgia, who is entitled to the honor of calling the attention of our farmers to it in this public manner. A detailed statement of his crop, with the method of cultivation, may be found in the Journal of this Society, and so confident is Mr. Peters of the success of this crop that he intends to plant one hundred acres this year. Preparations are making in most of the States for its cultivation, and we have no hesitation in affirming that it will be more extensively grown the coming season than any new agricultural product since the settlement of the country.

The increased consumption of sugar, the high prices of the same, and the decline of the sugar cane in the tropical climates, has awakened an additional interest, and it is impossible to predict the importance of this crop to American agriculturists. It has the advantage over the common sugar cane, being grown easily, from seed of which, in many States, it produces an abundance, and in its adaptation to every degree of latitude within the limits of our republic. It has also been grown in the West Indies, South America and Liberia. The past year it has been as successfully cultivated in the New-England and Western States, as in Georgia and the extreme South—and presents the prospect to our farmers of producing their sugar and molasses as easily as they now do their corn and potatoes, and being one of the most profitable productions of the soil. It contains from fifteen to twenty per cent of saccharine matter, and will yield from four to five hundred gallons per acre of syrup or molasses. It makes a very valuable food, and has produced in Kentucky nineteen thousand pounds of dry fodder to the acre. It is said to be incredibly heavy when compared with corn fodder, and that its comparative loss by drying is much less.

When planted early and on rich lands, in some of the States, it yields two crops in the season, and is equally good for cattle in a dry or green state, and it is presumed that the seed, when ground,

will make a valuable meal for the fattening of stock.

This seed plant, we believe, originated in China, and was introduced into this country by the way of South Africa and France, but to Mr. Browne, of the Agricultural Department of the Patent Office, our fellow associate, who procured seed while in France, are our citizens indebted for a general distribution of this product more than a year since. Mr. Browne thinks it may be cultivated to an extent equal to that of Indian corn, say twenty-five millions of acres, and he has kindly consented to address the Society on this subject. Other varieties of these sugar canes are said to exist in Caffraria, of which Mr. Wray, an English gentleman, has collected a number. These, he says, vary in time of ripening from seventy-five to one hundred and thirty days. What success has attended the cultivation of these, or what their comparative merits are, we are unable to state.

So favorable is the impression in relation to this new crop in all parts of the Union, and so thoroughly am I convinced of its great importance to American agriculturists, that I recommend the appointment of a special committee, to be charged with the duty of co-operating with the Patent Office, and of corresponding with Mr. Wray and other European cultivators, and also with any other gentlemen interested in the production of this crop.

For the Am. Farmers' Magazine.

EXTRACTS AND DOTS FROM THE JOURNAL OF A TENNESSEE FARMER.

"July 10, 1858.—Thermometer 92° Fahrenheit. Rain badly wanted. Wheat harvested; fifty per cent damaged with rust; some say caused by army or other worm laying the egg in the stock; some owing to the mild winter; a few to careless farming; others to a want of prayerful attention to Divine benignity on our part; others still to atmospheric causes outside any named; the rest to more occult causes, yet to be demonstrated by time and experience."

Could the editor of this valuable periodical give any new plan of preventive

to this terrible blight of so valuable a crop? Fortunately the last year's revulsion prevented many from selling their crop of 1857, at what they thought a ruinous price—one good effect the hard times had. Those who have their old store are the better off, though they may have no *flax to gingle* therefor.

I have been *bobbing around* some for the last few weeks, and I find the rust general in East Tennessee, the best low lands producing the lightest yield of this grain, the general variety, "White, Blue stem." The first I ever saw of this kind of wheat was in the hands of friend S., a good old German farmer. He said he got the start from seed from New-York State, and I think it very likely it is the same variety denominated in other neighborhoods, "New-York flint." Be this as it may, it falls behind the good old "quaker" this year, in quality and yield.

Now, whilst we are all said to be as imitative as emulative in our farming operations, I freely confess, for one, that I am somewhat partial to countries, people, names, etc. Well, what of this? Why, because I mean I would be partial to Germany, as a country, to Germans, as a people, and to New-York, because this people settled the colony in 1614. Ah, more, my ancestors saw first the light of heaven there. They were then "Dutch," and about 1776 they were Yankees, as true as any Yankees of that day. *Hark!* if any should recognize my fulsome panegyric, (which I insist is pretty well merited,) I dare say it would be said, he is blowing his own pipe. I don't care; it does not loath me; for I believe there is better wheat made in Germany, and that Germans raise the best wheat in the United States. I give the assertion without a footing of reasoning, for I think no one will take issue with me on the topic. Now, Mr. Editor, we have many, very many good Germans and descendants in our hill country of Judea, as much as

to say that New-York has not any more got them all, but must share the honors with her younger sister, from whence this desultory diary and dotting hails.

The oats crop is a failure on account of the rust. I say a failure generally. The straw became so weak before the grain (if grain it ought to be said) ripened, that it broke and fell to the ground, and in my neighborhood, in the low lands, two-thirds of the sown crop went unharvested. We raise here the Black Russian and the White (so-called) California varieties. My friend Mr. P., late of Maryland, later of Tennessee, now of Washington City, presented me with two quarts of "White Russian" oats, which I had sown. These were all the good oats I have grown in a crop covering ninety acres—too many acres for a farm the size of mine. (Most assuredly, unless you have reasons for growing many oats, which we, outsiders—from your business—know nothing about.—Ed.) This remark, it would seem, would naturally be elicited, but ordinarily it would, for other reasons, hold good. Why? Because I think I can grow grain of more benefit in use. Now, if Eastern Tennessee could grow such oats as I have seen grown in North Missouri, weighing one pound the quart, I would not talk so. But then, after near twenty years toiling here, I find I cannot grow such oats. Perhaps, Mr. Editor, if my said friend, Mr. P., of W., should see your journal, being a whole-souled gentlemen, and practical farmer, he would appreciate these pages of your publication as fully as I, and will be pleased to know that his present to me has proved so valuable. (Aside.) I regret I have nothing to requite my valued friend in return, for I know him to be far in advance in the system, practice and art of farming of any position I can ever expect to reach. By the way, friend P., if you are not a regular subscriber to this book, allow me to say, "One thing lackest thou yet."

The flax has suffered by rust. This crop is grown here for not only the lint, which is generally worth the labor, (although we grow cotton pretty fairly,) but for the seed, which yields generally about ten-fold. The price of flax seed is generally here say sixty cents the bushel, (your prints say from \$1 50 to \$1 75,) whilst the oil is about the same. Why this great contrast in price? However, it must yield now to easy transportation. *More anon.* A. L. B.

MILL BEND, Tenn., July, 1858.

For the Am. Farmers' Magazine.

CALEDONIA P. O., North Carolina, }
July 10th, 1858. }

ED. FARMERS' MAGAZINE:—The weather is very hot here at this time, and rather dry for the growing crops. We have just harvested the oat crop, and it is not very good. The wheat crop was injured by the snow and cold weather in April. The crop is now being threshed; it does not yield very well. I think the crop is inferior to that of 1857.

A large crop of the Chinese sugar cane was planted this season. It was tested sufficiently last year, I think, to remove all doubts about its making syrup. But a friend, who has recently returned from Florida, says that they do not like the Chinese cane there. They have tried it, and it does not do so well as the Cuba cane, or the kind they generally plant. My friend says that Florida is a fine country to live in. However, there are a few things which he does not seem to like, mosquitoes, fleas, etc. A large portion of Florida is still unsettled; good pine lands can be entered at \$1 25 per acre, and some lower than that, under the Graduation act. There is very rich hammock land around Lake Jessup, in Orange county; government price, \$7 50 per acre, and said to be the richest hammock land in all Florida. A man entering any of the land there, has three years to pay for it. He pays one-quarter cash, and the bal-

ance in three equal installments, or one-third every year. A man has a good opportunity to take up lands and pay for them on the above-named conditions. The climate is very mild and regular, no sudden changes of temperature either in winter or summer.

If the above will be of any benefit to your readers, you can publish it, making such changes in the style as you see proper.

J. BUIE.

We thank our correspondent for the information, and make no changes.—Ed.

A CURIOUS QUESTION.

SOUTH DANVERS, July 10, 1858.

MR EDITOR:—A question of some importance, as to the comparative influence of the *male* and *female*, in rearing stock for the dairy, has lately arisen here. Some have said, (My friend Secretary Flint among the number; See pages 28 and 48 of his last report,) that the influence of the male is to be limited to the size and external form of the progeny, and that the internal functions or milk producing powers are derived from the female. This may be pretty theory, but how is the fact? I have ever considered it as important, that the male should have descended from a good milking stock, as that the female should be a good milker. What is your experience? I am very confident that in offering and awarding premiums for bulls, it has been done on the principle as I have stated it.

Thinking it important to start fair, if we would run fair, I have ventured these queries on a fundamental principle of breeding, the comparative influence of the male, believing it to be as great on the milking properties of his progeny, as on any other. In fact I believe the distinction between the *external* and the *internal* qualities, as derived the one from the *male* and the other from the *female* to be imagination only, and not supported by facts. J. W. PROCTOR.

We strongly suspect the truth lies

very much in the line indicated by our friend Proctor, but can not claim to be authority in such matters.—Ed.

SWAMP MUCK.

Its application as a divisor and absorbent for the stables, yard and pens—For composting in the field—Can it in any cases be applied directly to the land?

That swamp muck differs in different situations, that some samples are far better than others, and that no man should be deterred from trying such as may be found on his farm by the evil reports of others, who have used a different article, is clear.

Some deposits, owing to the basin-shaped depression in which they are found, underlaid by an impermeable hard pan, have retained nearly all the original salts, of the grass, leaves, wood, &c., of which they are composed. Little water has run into them. Most of this has escaped by evaporation. None has left in a way to carry the soluble salts with it. Hence these salts are nearly all retained, and such muck is almost as valuable as barn-yard manure.

The general run of swamp muck is otherwise. It has been long washed. Its mineral salts—all that are soluble—have been washed out, and what is left is mostly vegetable matter, of little avail, by reason of its coldness and acidity, for present application, and in many cases most decidedly injurious, but when cured of coldness and sourness by sun and rain, worth variously from one fourth to one-half as much as good barn manure.

It is hardly less than insane for a farmer to be paying money for manures, and be at the same time stumbling over muck beds on his own farm, the value of which he has not tested. We would say to him, it may be that you are neglecting a 'deposit, where for the price of ten days' work, in the digging, curing and applying, you could get as much value as in a ton of Peruvian guano, which would cost you the price of sixty

or seventy days work; and why should you not be as willing to pay your money to the honest worker in your own neighborhood, as to a government too lazy to support itself, but by selling its fertilizers, especially as there is a probability that you would get six or seven times as much value for the same money?

We do not go against the purchase of manures. Millions of dollars worth ought to be carried from the city to the country every year, on such terms that the seller and the buyer can both realize a handsome profit; and whenever commerce in this line will consent not to be quite so craving, this expectation will be realized, much to the health of the city and the prosperity of the country. But the wise Creator and disposer of all things has so arranged that each district, and we might almost say each farm, possesses the means of its own fertilization in itself. In one place it is marl, in another it is green sand, in another it is rich deposits at the mouths of creeks, in others it is those old accumulations of decayed organic matter called variously, mud, peat, muck. Now what we desire is to encourage the farmer to make full trial of such resources as he has. The swamp muck is one of them, and taken in the aggregate is a very important one. In our 9th and 10th vols., and occasionally in this, we have certainly given sound instructions on this subject—instructions which were the result of experience, tried and known to be founded in truth—and we have no doubt that many of our readers have profited by them, and are doing well in this matter; but others we presume, are leaving those black and more or less rich deposits untried, and that too, in many cases, where this material wants to be taken out in order to drain the land. We say try it.

There are two ways to be commended, and another, which we will suggest, as perhaps doubtful. One is to carry the muck to the barn to be com-

posted with the manure as it is made during the fall, winter and spring; another to carry it to the field where it is to be used, with a view to compost it with manure there, in a way to save one removal; and a third, to apply it directly to the land, in autumn, as soon as taken from the ditch bank, or the muck bed. The latter could not be indiscriminately recommended, and it is perhaps doubtful whether it could ever be practised advantageously. We shall suggest it bye-and-bye, rather as an experiment, and with all necessary precautions.

Wherever the muck bed is near the barn, it is the best way to bring it home to be mixed with the manures from time to time in the stables, the yard, and the pig-pen. For this purpose it should be thrown up in the driest weather, as soon after harvest as may be; and after drying a few weeks, be carted to the barn and bestowed in such places as will be found most convenient for its timely mixture with the manure, during the fall, winter and spring, as an absorbent of the liquid portions, and a divisor for the whole, thereby to increase the quantity of the manure, without deteriorating its quality. Manure so prepared—half from the animal excrements and half from this muck—makes an excellent top dressing for upland mowing, and is good for all purposes, but *especially* so for the Indian corn crop.

If the muck bed be far from the barn, and especially if the ground to which muck is to be applied is distant and in the same direction, economy in transportation might require that it be removed directly from the bed to the field. In this case it should be so spread as to get a large amount of sun and rain. The more it is exposed to the air the better. To be dumped one load deep is better than several loads, one upon the other. To stir it occasionally with the plough is well, and for that reason it is a good plan to lay it in a low, long and narrow heap. Towards winter let it be

scraped together, and a bushel of ashes to the load be mixed. If as much lime is added (shell lime is the best) so much the better; and in case the ground, to which you mean to apply it, is of a kind known to be benefitted by plaster, add as much of that as will give two bushels to the acre after making the application. Early in the spring carry to the field and mix barn manure, load for load, and apply it as soon as active fermentation takes place. For Indian corn, it is better that half or two two-thirds should be harrowed in, and the rest applied in the hill, if the soil is stiff; but on a light, warm soil the whole may be ploughed in, with a saving of labor and equally favorable results. That a moderate dressing of this compost, requiring but ten or twelve loads of manure from the barn, will produce a large crop, on any decent corn land, is among the few things that are settled beyond doubt.

Whether swamp muck carried directly from the ditch side or the muck bed, and applied as a top dressing to mow land, in autumn, to be often frozen and thawed through winter and washed with frequent rains and melting snows, to take out its sourness, would give favorable results, is more than we know. Several things would certainly be necessary to the success of such a measure.

1. The muck must be of a good quality, such as in a short time would settle down into a fine black mold.
2. It should be dug some months before being carried to the field, that the acids might be at least partly washed from it.
3. It should be spread tolerably evenly, and worked down among the roots by a bush harrow.
4. We think it would be necessary to spread ashes over it in the spring, to take out the remaining sourness, and to furnish the soil with those salts, particularly pot ash, which are generally deficient in this substance, it being in most cases made up of decayed vegetable matters, from which the active salts have been washed away. And in

the 5th place, we would not so apply it unless to land naturally sweet and not at all peaty.

Experiments of applying raw muck to mow land at randora have been made, but with unfavorable results, so far as our knowledge extends, just as we should have expected. If applied according to our suggestions, we rather think that paying results would follow, and we should like to see the trial made.

A fair way of trying it, would be to put 80 loads of muck on one acre, with a few bushels of ashes to follow in the spring; on a similar acre adjoining, to put just as many ashes but no muck; and then to take note of the crops for at least three years.

A NEW CURE FOR POTATO ROT.

THE *Newburyport Herald* publishes a new theory of the cause and cure of potato rot, put forth by Mr. Paul Pillsbury of Georgetown, Mass. He thinks the cause to be a small herbaceous insect that perforating the tuber extracts the life of the vegetable so that decomposition follows. The remedy which he has tried for two years, is very simple and within the reach of everybody in this vicinity. It is in the oyster shell, which he says contains a carnivorous insect that wars upon and destroys that so destructive to the potatoes. He places a couple of shells in every potato hill, or lays them on the ground where the vines will come in contact with them, and finds in that his remedy. It is very certain that the shells will be beneficial to the land as a fertilizer, and if at the same time they will preserve the vegetable, they will answer a double purpose, and become of great value to our farmers.—*Me. Far.*

Keep a look-out. You may find the cause yet, and the means of cure. Is it possible that this is the same insect described by Mr. Henderson, near Buffalo?

It is said that when corn costs 50 cents per bushel, pork costs 5 cents per pound.

Horticultural.

CALENDAR FOR AUGUST.

FLOWERS.

THE flower beds should now be gone over, with the view to prepare them for the display of the principal autumn bloom. For this purpose all the perennial herbaceous plants in the borders should be cut down to the surface of the ground, and summer annuals past their beauty removed. This will give room for the autumnal flowers, now advancing rapidly, to grow with freedom, and also for the introduction of some geraniums, heliotropes, and other greenhouse plants in the larger spaces made by the removal of annuals. In the front or between them, some pansies and verbenas may be planted.

German asters will be very handsome either in beds by themselves, or in clusters of four or five plants, between the verbenas and smaller flowers, provided care be taken to contrast the colors effectively.

Dahlias should be well staked, and watered liberally in very dry weather.

Some *petunias*, *salvias*, and *heliotropes*, should be cultivated in pots, and their shoots stopped every ten days or so to make them bushy, to decorate the Greenhouse in early winter.

Chinese primrose may be raised from seed, if sown immediately under glass for the water Greenhouse.

Greenhouse plants that are indoors should be shaded on the roof of the house from midday sun, and the floor of the house should be drenched with water in the evening to moisten the atmosphere around the plants.

Greenhouse plants out of doors will also benefit from partial shade in the heat of the day, and their roots must be protected from the action of the sun on the sides of the pots, or they will injure

materially. These must not be allowed to suffer from want of water.

The syringe should be used liberally morning and evening amongst all greenhouse plants at this season, which especially assists to keep them free from insects.

KITCHEN GARDEN.

Spinach may now be sown for autumn crops.

Carrots, also, for a late crop, if sown at once.

Turnips of all the large kinds, for fall crops.

Peas will give in most seasons a fair crop if sown the middle and end of the month.

Mushroom beds may now be made in a shed or a cellar.

Beans may be sown for pickling, and *Cucumbers* also.

Lettuce should be sown for autumn crop.

Endive should be transplanted, and may be sown for a late crop.

Cabbages may still be planted, but the larger kinds especially should be put out without delay.

Celery may still be planted, with care in shading and watering.

Radishes may be sown towards the middle of the month.

All crops now advancing to perfection require constant tillage and care to keep the earth about them loose and to eradicate weeds.

PREPARING SOIL FOR GARDENS.

The following, which originally appeared in the *Northern Farmer*, but which we cut from the circular of C. & W. McCammon, tile manufacturers at Albany, N. Y., seems to embrace a large amount of practical good sense on the preparation of garden soils, besides

much collateral instruction on the draining and trenching of land. Instead of saying, as the writer does, "A few soils do not require draining, but with most it is indispensable," we would say, "Many soils do not require draining; with many it is desirable, because it will pay well; and with some, and these not a few, it is indispensable, so that you may better abandon them than not to drain."—Ed.

There are several reasons why the soils of gardens should be made better than for ordinary farm crops.

1. Most of the products of gardens are of a succulent nature, or will otherwise bear high feeding, such as garden roots in general, plants whose leaves furnish food, as lettuce, cabbage, etc., or those which produce large and succulent fruits, as cucumbers, melons, squashes, etc.

2. As nearly all garden crops are the immediate food of man, while many farm crops are only the coarser food of animals, greater skill may properly be applied in bringing the former forward to a high degree of perfection.

3. The great amount of family supplies which may be obtained from a half-acre garden, provided the best soil is prepared for their growth, renders it a matter of equal importance and economy to give the soil the very best preparation.

It rarely happens that there is much selection to be made in soils as we find them in nature, for gardening purposes, unless particular attention is given to the subject in choosing a site for a new dwelling. Generally, we have to take the land as we find it. Unless, therefore, we find it just right, we should improve it in the best manner. The principal means for making a perfect garden soil, are *draining, manuring and trenching*.

Now, lest any one should be startled at the outset with the fear of cost, in thus preparing the soil, we may remark that the entire expense of preparing half an acre—which would constitute a large kitchen garden—would not in general amount to more than the amount saved in a single year in the purchase of food for family supplies, by the fine and abundant vegetables afforded. If the owner cannot possibly prepare his half

or quarter acre of land properly, then we would earnestly request him to occupy the ground with something else than garden crops, and to take only a single square rod—if he cannot attend to more—and give this the most perfect preparation. A square rod of rich, luxuriant vegetables will be found more valuable than eighty rods or half an acre of scant, dwarfy and stringy growth, which no one will wish to eat; while the extra cost and labor spent on the eighty rods in seeds, digging and hoeing, would have been more than sufficient to prepare the smaller plot in the most complete manner.

Let the determination be made, therefore, at the commencement, to take no more land than can be properly prepared, and in the best and most thorough manner.

DRAINING.

A few soils do not require draining, but with most it will be indispensable. Where the subsoil is gravelly or porous, so that any amount of extra surface water will be immediately discharged below, the operation is not needed; but in all cases where, in digging a hole two feet deep, the water is found to stand in its bottom during the wettest times, we may be sure that draining will be of the greatest importance in preventing a cold, sour subsoil, and stagnant water beneath its surface. Such a condition of the soil could not fail to prove exceedingly detrimental to good growth, and drains not more than thirty feet apart should be made as the first indispensable requisite. No one who has never given draining a full and fair trial, can appreciate its importance. It often happens that the soil may be worked and planted from two to four weeks earlier in spring—a most important advantage for *early* vegetables, where a few days of accelerated maturity are so highly valued. Scarcely less is the benefit during the rest of the season, in preventing a hard and baked soil in times of drouth.

TRENCHING.

A surface soil of a few inches only will not answer for a good garden. The roots of succulent vegetables must extend into a deeper bed of fertility; and a greater depth of pulverization is required to absorb surplus rains, and to give off the accumulated moisture in dry weather. A shallow soil will become deluged by a single shower, because the

hard subsoil will not allow it to pass downward; and again, in the heat and drouth of midsummer, a thin stratum is made dry and parched in a week, while one of greater depth becomes scarcely affected. We might cite numerous instances where trenched gardens remained in the finest state of luxuriance during the most severe drouths, when others under ordinary management were burnt up with the heat—growth having quite ceased, and leaves curled and withered for want of moisture.

The *mode* of trenching must vary with circumstances. In small, circumscribed pieces of ground, necessity requires it to be done by hand, according to the well known process of throwing the earth to one side, from a ditch cut between the trenched and untrenched portions of the ground. It is not unusual to trench three feet deep for trees, but for the kitchen garden two feet or even twenty inches will answer an excellent purpose, and prove incomparably better than its entire omission. Disappointment sometimes results from the practice of throwing the poorer subsoil to the top; this should be avoided, or at least but a portion of the lower soil mixed with the upper, and at the same time a copious amount of manure mixed through and more abundantly applied near the bottom. Compost or old manure is best, but fresh manure will answer nearly or quite as well, provided it is thoroughly broken up with an iron rake, and mixed in as the work advances.

The cost of trenching by hand may appear great; but when its future results are taken into the account, it will be found to be a remarkably paying expenditure—the gain amounting, perhaps, to five hundred or a thousand per cent, for subsequent years. It may be greatly cheapened on all grounds where a team can be used, by the subsoil plow, to loosen up to a depth of one and a half or two feet. A double Michigan plow may be afterwards employed with great ease in this loosened bed of soil to bring any desired portion to the surface, but more especially for working in through all parts a plentiful supply of manure.

The cost of preparing thus a half acre of ground will be about as follows:

One coat of manure or compost, ten loads drawn	\$10 00
Two thorough harrowings of this manure, to break and intermix it.....	0 25
Plowing with a common plow, followed with a subsoiler and double team.....	8 00
Another coat of manure, twenty loads.....	20 00
Two thorough harrowings.....	0 25
The whole thrown under to the depth of 15 inches, by a large Michigan plow and triple team.....	8 00
A third coat of manure, twenty loads.....	20 00
Two harrowings.....	0 25
Plowing under with a common plow, about 8 inches.....	1 00

Total cost for preparing garden ground, \$57 75

Of this expenditure, \$50 are paid for fifty loads of manure, (for half an acre, or 100 loads per acre,) and only \$7 75 for all else, after the manure is applied, the drawing of the manure being reckoned with the cost \$1 per load. The manure would cost the same if applied in the common way, and would be much less efficient; hence the subsoiling, plowing and harrowing are operations of great economy, if only the saving in the manure is considered.

The mode and depth of some of the plowing must be made to vary with circumstances. If manure, well harrowed, and turned under with a gang-plow will be advisable. The precaution must be observed, however, in any modification of the preceding process, to throw down the subsoil, if sterile. The plowing after the subsoil must not be so deep; and a fourth coat of each successive coat of manure to a depth differing from that of the others. If *fresh* manure is applied, a greater number of harrowings will be necessary to break and intermix it, an operation of the greatest importance, and increasing several times the efficiency of the manure, according to careful experiment.

The present time of year will be found suitable for preparing for some of these operations. Sometimes hand trenching may be done to great advantage towards the close of the winter, when the subsoil is softened with moisture and digs easily; and manure may be collected and sometimes composted. If the composts are prepared a year, or at least several months ahead, so much the better.

NITRATE OF SODA ON STRAWBERRIES.

THE proportion in which the nitrate of soda has been successfully applied to strawberries, is three ounces to the square yard, sprinkled regularly over

the surface of the bed just as the plants are beginning to grow. Although it may injure the foremost leaves, the succeeding ones will soon put forth with redoubled vigor.

THE AUTUMNAL FLOWER GARDEN.

BY AN OLD AMATEUR.

WITHOUT some touch of "the enthusiast" about us, few of us *excel* in anything. The plodder may do a thing well, and may make money too. But to excel,—to do a thing as few others do, or can do,—a man must be a little conceited or a little self-confident, and moreover a little enthusiastic. This applies to flower growing as well as to anything and everything else that you, Mr. Editor, please to think of. For albeit, you are a wise man, you could not, I know, get up your farming articles as you have this year done in your magazine, unless you were (whether you will admit it or not) a little bit of an enthusiast about farming. I am glad you are; it gives spice to your writing, and earnestness to your diction. So go ahead the same way—enthusiast as you are—saving the dignity of the editorial chair.

But this enthusiasm sometimes makes us all (except an editor) commit big blunders. Like the boy with the plum-pudding; as he wanted to eat it all, and cried because he could not, so do we amateur florists want to do too much. We see a pretty new flower; or an old one well grown, forthwith we must do the same. Next day we see another. *That* we must grow too. And the result is, that although we may succeed tolerably, we do not *excel*.

But descending a grade below—floriculturally at least—us professing, though who not professional florists, our friends who have not all our cultural lore, seek to imitate us and grow "everything." Then comes a dire failure, and the result is that the flower garden becomes a heterogenous mass of flowers

without arrangement, taste, or beauty of any kind to recommend it.

Try if you can not induce people to attempt to grow a few flowers respectably before they fill their borders with untold and to themselves, unknown numbers, and varieties of flowers.

For the ordinary flower garden to look well and *tell*, but little science is necessary and only a little common sense. The aim should be to make the garden look well in summer, and again in autumn. The summer garden is generally the best managed, because most people have some roses and some herbaceous perennials, and as they usually sow some annuals, the whole make a fair and often a handsome show. The autumnal garden on the contrary is seldom effective. A few Dahlies intermixed with the dying summer annuals or decayed flower stalks and overgrown foliage of the herbaceous perennials is commonly the scene of confusion worse confounded of the autumn garden.

My purpose is to give a few, and but a few hints, which if attended to, will, I think, produce a very different scene in the garden of any one who chooses to try them. And it is not too late to make the experiment this present season.

There are three families of flowers which alone will create a beautiful autumnal garden. And in each of them the varieties of colors are almost endless. These are the Phlox, the Dahlia, and the Chrysanthemum. The two first may be had in bloom with a little care through August, September and October, and the last from September until the commencement of sharp night frosts.

In July or the beginning of August the flower garden should be cleared from all the remnants of the summer's bloom. Decayed flower stalks and dying leaves should be removed, and also the annuals that have exhausted their powers. The borders should be forked, hoed, and raked, and the whole prepared for the autumnal display. The

Dahlias and Phloxes should have been planted some weeks back, but may still be introduced from pots or, *with care in removal*, from the open ground, being in the latter case especially attended to as to water.

The Chrysanthemum admits of planting or removal from other places without trouble, at any time up to the end of August or even September, and the dwarf and tall kinds are here so beautiful and so numerous that they form a flower garden in themselves. They are however rather late in blooming, and on that account are valuable only for the later season of the year.

Of course I do not intend that there should be *no* other flowers in the autumn garden, but if the above are relied on for the chief objects of attraction, I will answer for it, that the result will prove satisfactory. The varieties of each of the families pointed out are numerous and cheap, and may be obtained of any nurseryman of respectability, and as they are all perennials, when once purchased, they have not to be annually bought, although as most people know, the Dahlias require to be taken up and their roots preserved through winter. The others are hardy and may remain in the open ground.

AMERICAN POMOLOGICAL SOCIETY.

THE Seventh Session of this National Institution will commence at Mozart Hall, 663 Broadway, in the city of New-York, on Tuesday, the 14th day of September next, at 10 o'clock A. M., and will be continued for several successive days.

Among the objects of this meeting are the following: To bring together the most distinguished Pomologists of our land, and, by a free interchange of experience, to collect and diffuse such researches and discoveries as have been recently made in the science of Pomology—to hear reports of the various State Committees and other district associations—to revise and enlarge the Society's catalogue of fruits—to assist

in determining the synonyms by which the same fruit is known in America or Europe—to ascertain the relative value of varieties in different parts of our country—what are suitable for particular localities—what new sorts give promise of being worthy of dissemination—what are adapted to general cultivation; and, especially, to concert measures for the further advancement of the art and science of Pomology.

The remarkable and gratifying progress which has recently been made in this branch of rural industry, is in no small degree attributable to the establishment and salutary influence of our Horticultural and Pomological Societies, the proceedings of which have been widely promulgated by the press. A great work has been already performed, but a greater still remains to be accomplished. It is, therefore, desirable that every State and territory of the Union and the Provinces of British America should be ably and fully represented in this Convention, and the Pomological, Horticultural and Agricultural Societies, within these limits, are hereby requested to send such number of delegates as they may deem expedient. Nurserymen, fruit growers, and all others especially interested in Pomology, are also invited to be present, and to participate in the deliberations of the meeting.

Held as this Assembly will be, in the great commercial emporium of our country, easily accessible from all parts of this continent, and at the same time when the Convention of the Editors of the Agricultural Press will be in session, it is anticipated that the attendance will be larger than on any former occasion, and the beneficial results proportionably increased.

In order to increase as much as possible the utility of the occasion, and to facilitate business, members and delegates are requested to forward specimens of fruits grown in their respective districts, and esteemed worthy of notice; also, papers descriptive of their mode of cultivation—of diseases and insects injurious to vegetation—of remedies for the same, and to communicate whatever may aid in promoting the objects of the meeting. Each contributor is requested to make out a complete list of his specimens, and present the same with his fruit, that a report of all the varieties entered may be submitted to the meet-

ing as soon as practicable after its organization.

For the purpose of eliciting the most reliable information, the several Fruit Committees of States, and other local associations, are requested to forward to Hon. Samuel Walker, General Chairman of the Fruit Committee, Roxbury, Mass., or to P. Barry, Esq., Secretary of the Society, Rochester, N. Y., a definite answer to each of the following questions, at an early date, and prior to September 1st:

What *six, twelve and twenty* varieties of the APPLE are best adapted to a family orchard of *one hundred* trees, and how many of each sort should it contain? What varieties, and how many of each, are best for an orchard of *one thousand* trees, designed to bear fruit for the market?

What *six and twelve* varieties of the PEAR are best for family use on the Pear stock? What varieties on the Quince stock? What varieties, and how many of each of these, are best adapted to a Pear orchard of *one hundred* or of *one thousand* trees?

What are the *six and twelve* best varieties of the PEACH for a family orchard? What are the best varieties, and how many of each, are best adapted to a Peach orchard of *one hundred* or of *one thousand* trees?

Answers to these questions should be made from reliable experience, and with reference to the proximity or remoteness of the market.

Societies will please transmit to the Secretary at an early day a list of the delegates they have appointed.

Gentlemen desirous of becoming members can remit the admission fee to Thomas P. James, Esq., Treasurer, Philadelphia, who will furnish them with the Transactions of the Society. Life Membership, twenty dollars; biennial, two dollars.

Packages of fruits may be addressed to Wm. S. Carpenter, 468 Pearl street, N. Y.

MARSHAL P. WILDER, President,
Boston, Mass.

P. BARRY, Esq., Secretary,
Rochester, N. Y.

[Editors favorable to the advancement of the above objects, will please give this Circular an insertion in their columns.]

CHERRY-CURRENT.

At a recent meeting of the American Institute Farmers' Club, Mr. Erhard, of Ravenswood, presented an important paper on the Cherry-Current. To what extent Mr. E.'s statements may have been influenced by private considerations, we know nothing. They are as follows, and if reliable, they show the Cherry-Current to be of great value.

DESCRIPTION OF THE CHERRY-CURRENT.

It is not a distinct species of the genus *Ribes*—only a new variety of *Ribes Rubrum*, of which the red and white Dutch and many others are also varieties. It is, therefore, just as hardy as the common currant. The distinguishing properties of the cherry-currant are:—Strong, robust growth of the bush—the shoots being stouter, the leaves larger, and of a darker green, than the common sort. The blossom of the cherry-currant is easily distinguished from the greenish yellow blossom of the red and white Dutch by its darker brownish color. But the greatest and most valuable distinction of the cherry-currant consists in the uniformly great size of the berries. They measure from half an inch to five-eighths of an inch in diameter, all the berries of a bunch being generally of nearly one size, while the bunches of a common currant taper down to a very small berry at the end. Beside this, the berries are also distinguishable by their dark red color. Another and very striking feature of the cherry-currant consists in the manner the bunches are distributed over the branches. While with the common currant the fruit is rather thinly—at least, by comparison—scattered over the branches, the cherry-currants hang in massive clusters, so tight that the stems of the fruit-strings can scarcely be seen. Branches of the bush of from one to three feet in length are often unbroken clusters of luscious fruit, which gives the bushes a charming rich appearance.

HOW TO GROW THEM.

Many farmers and market-gardeners seem to think these good qualities can only be brought out by very high culture, such as the amateur gardener only can bestow on a few pet bushes. This is an error. I would say: Manure, plow and hoe them as you do your Indian corn,

and you will have them in as great perfection as the nurseryman.

As the bushes grow very strong, they should be planted not less than 4x4 feet, or perhaps 4x5 feet apart, which will give 2,178 plants per acre. I prefer the latter method, and would plow only one way between them, allowing the branches to spread in the direction of the rows, so as to form something like a hedge. These rows should run north and south, to shield the bushes from the hottest mid-day sun. Shade to the fruit is indispensable to bring it to perfection; if too much exposed to the hot rays of the sun, the berries ripen prematurely before they attain their full size. Now, all the shade necessary to protect the fruit is furnished by the bush itself, if you do not disable it to do so by pruning and cutting away what was evidently intended for that purpose; and this brings me to the shape in which currant bushes should be pruned. I am aware that there exists a great difference of opinion among cultivators as to this point. Many believe that the tree shape is decidedly the best; others think the bush form, with several branches springing directly from the root, the better and most natural shape. I have tried both ways, but prefer the latter method greatly. The great advantage of the bush form, it seems to me, consists in the system of renewal which should be combined with it.

Suppose you plant your bushes with two prongs or branches. Plant them deep and allow the first year two shoots to grow up from under the ground. These shoots will at the same time send out their own roots and grow luxuriantly. If you allow, then, every year two more shoots to spring up from the root, you will, in the summer of the fourth year, have two branches each of five, four, three, two and one years' growth. Six of these branches, that is, the five, four and three year old ones, will be loaded with fruit, the two years' growth may have some berries, and those of this year's growth will only be straight shoots. The bushes will now be as large as they should be, and the two five-year old branches may be cut out as soon as the fruit is picked; and henceforth, by allowing still two new shoots to come up every year, and by cutting out the two oldest branches after the gathering of the fruit, the bushes may be kept young and bear fine fruit for many years more.

Of course this is only meant to elucidate the general principle. The practical cultivator will know how to modify the above rule for every individual bush.

PRODUCTIVENESS.

In calculating the profits of a crop, great caution must be used, and casualties must not be forgotten. Although I have seen four-year old bushes that bore nine pounds of berries to each bush, I would not think it safe to put down the average yield of a full grown five-year old bush, trimmed as above, at more than six pounds. This would amount to 13,068 pounds to an acre. The price of common currants in the New-York market, generally very small, sour little things, varies from four to seven cents per pound at wholesale, which certainly justifies the anticipation of six cents per pound for cherry-currants for many years to come, and this would make the value of the crop per acre equal to \$784.

EXPENSES OF CULTIVATING AND GATHERING.

Half a day of plowing, and three days of hoeing, by one man, will clean and stir the ground of one acre most effectually, which, at ordinary wages of man and horse, will cost \$3 50, which makes four plowings and hoeings cost \$14. Picking 13,068 pounds, at one-third cent per pound, (about fifteen cents per bushel,) will be \$43. If we allow \$27 for manure every year, the whole expenses per acre would sum up to \$84, leaving \$700 clear, of which only the cost of bringing them to market would have to be deducted.

TOMATOES.

For several years past I have been in the habit of trimming up my tomato vines pretty closely. After as much fruit is set as will ripen before frost, I go among them with a pair of shears, cutting off the tops and all young shoots, to prevent any more fruit being formed. In this way they grow larger, fairer, and ripen much earlier, I think. Without thinning out, the sun's rays can hardly reach them through the rank growth of leaves. I have recommended this plan to some of my neighbors, but as they have seen nothing of the kind "in the books," they cannot venture to cut off "such beautiful branches," though they see my tomatoes ripen one or two weeks

earlier than any in the neighborhood. Now, Mr. Editor, if you think I am right, just give this a little corner in the New-

England Farmer, and my neighbors will receive it as "by authority."—*N. E. Farmer.*

Miscellaneous.

THE PIRATES OF SAUGUS.

AN ORIGINAL TALE OF 1658,

FOUNDED ON FACT.

[Entered according to Act of Congress, in the year 1852, by J. A. Nash, in the Clerk's office of the District Court of the United States, for the Southern District of New-York.]

[CONCLUDED FROM OUR LAST.]

THE renewal of the search for pirates, which was about to be made, had been resolved upon in consequence of the gradual accumulation of circumstances, which had directed the special attention of the cruisers on the coast to the Saugus and its forests, as affording a hiding-place that concealed the perpetrators of several outrages which had been committed in the locality; and this had led to the renewal of the search. For the escape of the four pirates, and the impossibility of finding them, three or four years previously, had not been forgotten.

It happened that on the occasion of one of Veal's visits to his village friends, a party from the cruiser had landed to make inquiries, and in so doing they called in at Ransom's cottage. Veal's sailor's dress caught their eye, but finding him evidently on terms of intimacy with all around, his appearance excited no suspicion in their minds. His inward feelings, nevertheless, can be readily surmised; especially when, in reply to their questions, he heard Charlotte's mother remark that "may be the cottage where Charlotte asked her way, when she lost herself in the woods, was a pirate's."

Concealing his feelings whilst the conversation proceeded, (and from which he learned the resolve of the cruiser's party to hunt the forest from end to end,) Veal thought over the course which he

should pursue; for he saw clearly that to return to the Pirate's Glen was to incur the likely chance of certain destruction; whilst, on the other hand, to remain in the village was scarcely less hazardous. Because, in the event of his associates being taken by the party, and brought into the village, he knew that they, finding him there, would suspect him of treachery, and would therefore, in revenge, betray him at once to their captors.

After meditating some time, he recollected a cavern in the forest, removed some two miles from the Pirate's Glen. In that he resolved to take up his residence, until the pending events had come to some issue. Taking his leave therefore, as usual, of his village friends, he started off. He purchased, before he left the place, some provisions, under color of wanting them for his vessel, and thus provided, he knew he could remain in seclusion and security until the cruiser had taken its departure, of which he could inform himself from the tops of the neighboring hills.

Arrived at the cavern, he concealed his provisions in a remote crevice, and spent his time principally in strolling through the glades of the forest around, in order that he might not appear to be an inmate of the cavern, in case the cruiser's party should chance to meet him. For as he had made (however unwillingly) their acquaintance in the village, he now calculated to avoid their suspicion, should he see them, by keeping near a road-way through the wood, that led from the village to a distant town, and to which, therefore, he could appear to be a traveler. At night only, therefore, did he return to sleep at his

cavern; ascending a hill, every morning, to see if the cruiser was still at anchor.

In this way passed over several days, when one evening, on going up to his look-out, Veal found the cruiser had spread her sails to a brisk breeze, and was fast making down the bay. The following morning the vessel was not to be seen, and Veal therefore felt that the danger for him was past.

Anxious to know the fate of those with whose his own was so intimately connected, (for their removal from his future path was not less agreeable to him than was their capture desired by the cruiser,) Veal started off for the Pirate's Glen. Approaching cautiously, he found the silence of solitude prevailed around, and soon saw evident marks of a recent affray. On entering the hut he found it had been ransacked completely, and no doubt therefore remained upon his mind that the king's men had found out the pirate's retreat. But whether his companions in crime had all been taken, or whether any of them had escaped, he knew not. Afraid to remain in the hut, he stationed himself behind a jutting point of the rock, from which he could command, unobserved, a view of the hut and glen, and there he determined to watch through the remainder of the day and the approaching night, to see if any of them returned.

The following day had far advanced, and no human footstep had come near the place. Veal therefore resolved to go to the village, feeling confident that the chances were much in favor of his associates having been taken away by the cruiser. He had scarcely entered the village when he was surrounded by some of his new friends, each anxious to give him the information, which they little thought was so welcome to his ears, that his assumption was correct.

From their statements it appeared that immediately after Veal's departure on his last visit, the cruiser's party

started into the forest upon their errand; but that for many days all their efforts were futile.

During this time, as they returned each evening to the village, considerable excitement on the subject was kept up, and in the various discussions that this led to, the facts relative to the making of the handcuffs and hatchets, and their deposit and exchange for the bag of silver, became known to the searching party. The story of Charlotte's loss in the wood, and her account of the woodman's hut, were also discussed, and Charlotte was herself subjected to a strict interrogation about it. Confident, however, in the integrity of her lover, and not willing to disclose the fact of her first interview with him having taken place at the woodland hut, now that he had, in so ingenious a way, obtained the good opinion of her parents, she would say no more than that she was certain the rural abode where she learned her way was but the temporary hut of a woodman; and that she was so frightened and bewildered by fear that she had no idea whatever of the locality of it. The natural features of that locality, however, she described, but she omitted altogether that she was led blindfold from it, by one who her auditors present knew so well. Had she done so, doubtless they would have arrived at very different conclusions from her tale, than those which her innocent but susceptible heart induced her to draw from the same facts.

With the additional guidance, slight though it was, of Charlotte's description of a valley flanked by precipitous rocks, and shut in by dense foliage, the cruiser's party renewed their search, and after three days' further ineffectual wanderings, they at length came upon the Pirate's Glen. Night was drawing on, and not doubting that the object of their mission was within grasp, the party concealed themselves until the evening had closed in, and till a light that they ob-

served through the window of the hut was extinguished. The party then surrounded the place, and bursting open the door, the three pirates were surprised and made prisoners before they had the opportunity to make effectual resistance. Not knowing whether they had secured the whole of the confederates in crime, the party hurried their prisoners on board their vessel, and set a watch for the remainder of the day on the Glen, leaving during that time everything in the hut undisturbed, and as it was when they made the capture, in order as far as possible to conceal it from other members of the gang, if such there were. But finding that nothing had been touched, and no one approaching the place during that time, they concluded that they had captured the whole gang; and they therefore ransacked the hut for evidences of the guilt of their prisoners, and set sail on the next day.

Relieved by this information from all alarm on account of personal danger for the present moment, Veal saw clearly that his rescue from the penalty of his past career was far from complete. For, although he had kept back his real name, and was known in the village by an assumed one only, yet he foresaw that his identity would appear probable to the king's men, who had seen him, when compared by them with that description which he doubted not the prisoners would give of him. Although in point of fact, untruly, he was satisfied that his associates would attribute their fate to his treachery, and would therefore aid in his capture. He, on that account, feared a return of the cruiser, and the consequences of it.

To escape this contingency alone and unaided, Veal felt was beyond his skill; and his feelings now being so completely wrapped up in Charlotte that he regarded life without her as valueless, he made the bold resolve to confide that life to her; well assured that when once heart-

ily given, woman's love knows not the limit that bounds her devotion to the object of her affection. Acting at once upon his determination, Veal told Charlotte his history; modifying, in some respects, its most revolting incidents, and making his association with the pirates appear to have resulted from compulsion to save his life, inasmuch as he led her to suppose that he had been captured in a vessel taken by them, and that heretofore he had never since had the opportunity to escape.

This trial of poor Charlotte's affection was a severe one, for she knew that she could not hope, if the truth became known to her parents, to obtain their approval of her lover. But her feelings were too intensely interested in the result to allow her judgment fair play. The danger to which she saw her lover was exposed, added to the account he gave of his anxiety to escape from a pirate's life, appearing to agree so well with his visits to her, and his conduct generally since she first saw the Pirate's Glen, her wavering resolution yielded to the side of mercy, and she promised to co-operate in protecting Veal from capture. She, however, positively refused to become his wife until the uncertainty hanging over him was dispelled, for she felt that she was now transgressing the strict line of duty to her beloved parents, whose happiness was as dear to her as her own.

It was arranged, therefore, upon full discussion of the difficulties by which they were surrounded, that Veal should take up his abode in his woodland cavern, unknown to all but Charlotte. That he should there pursue his trade of a shoemaker, which he could easily do by working for masters in the village, where he would have no difficulty in getting employment. Without disclosing his residence, and under the plea, he had before made use of, that his sea-going adventures still for a time required his attention elsewhere, he could periodi-

cally visit the village to obtain and take home his work. With such an arrangement, he knew that if the cruiser should return in search of him, Charlotte would at once know it, and could immediately convey to his cavern the intelligence, so as to afford him time to elude pursuit, and to concoct measures for his safety.

In this way passed on several months, and Veal becoming impatient of his position, urged Charlotte to consent to his adopting measures to celebrate their marriage, with the approval of her parents, which, without suspicion on their part of his real history, he did not fear to obtain. Charlotte, however, although every week increased her confident hope that no circumstances had transpired to compromise her lover, was anxious to obtain positive information on the subject before she risked her fate, and the peace of mind of her parents, upon the cast of so fearful a die. It was usual for some cruiser to visit the neighborhood at intervals of a few months; and she knew that when the next arrived, she would hear of the fate of Veal's associates, and so get positive knowledge as to the possibility of his having been compromised.

So matters passed on from week to week, until an unexpected catastrophe occurred, which drew the eventful drama to a close.

In the month of ———, 1658, the year which had now arrived, occurred the earthquake at Saugus. An omonous and deathlike stillness had for several days prevailed in the atmosphere, which seemed to be filled with murky exhalations proceeding from the ground, that penetrated every recess, and depressed the energies of animal life. Rumbling subterranean sounds, like distant thunder, were heard at short intervals to proceed from the laboring earth, that proclaimed to the panic-stricken inhabitants forebodings of impending ill. By slow degrees the intensity of these sounds increased, and tremblings of the ground

were felt, so slight at first as to render it doubtful whether they found their origin in fact or in the fears of the affrighted people. At length clouds, dark as the deepest shade of starless night, gathered overhead, and thickened mass upon mass, obscuring with an impenetrable veil the light of day. Sulphurous vapors mingled their death-like pungency with the loaded mist that floated around, and the awful foretaste of impending destruction took a hold on every mind.

At last came the climax of these dread signs. With a crash to which the bel-
lowing of ten thousand cannon would dwindle into whispers, the earthquake broke through its iron bonds, and upheaved like snow-flakes the surrounding rocks, from whose uplifted fragments toppled over monarchs of the forest that had weathered a thousand storms! The foaming waves of the neighboring bay, towering in mountains towards the skies, dashed with the lash of frenzy from their dizzy height down upon the craggy precipice at whose feet lay their wonted bed: and then, as though conscious of their vain presumption, were the next moment themselves lost in a fathomless abyss, that laid open to the sky those treasures of the deep, too fondly cherished by the ocean nymphs, to meet, in nature's daily garb, the curious eye of man!

Increasing in violence, the howling blast tore from their roots whole groups of trees, which hurled far, with more than giant force, descended in fragments on the astounded earth, and strewed its surface, for miles around, with Titanic garlands.

Rage so vehement could not endure. In a few minutes, as though wasted by her own strength, exhausted Nature seemed worn out by the havoc she had made. To the turmoil of destruction succeeded the quiet of despair. Man feared to look around, lest at each glance he found some death-bed misery for himself brought forth. Agony took the

place of grief at sight of horrors that before were never known! Limbless and torn, half swallowed in some gaping cliff, or hanging mid-air on some riven cragg, all nature seemed overspread with fragments of the human frame; whilst those whom fate had spared from present death, scarce knew the altered world to be their own!

* * * * *

Charlotte and her family escaped the fury of the elements, and anxiously did she wait news of her caverned lover. Day followed day, however, without his visiting the village, and Charlotte's heart beat quickly as she started off alone to learn the cause. Her sad forebodings were too true. Arrived at the spot, she found the entrance of the cave completely closed. An enormous mass of overhanging rock, disrupted by the heavings of the earthquake, had fallen, and closed forever the door of escape upon the pirate of Saugus!

Immured whilst living in his mountain tomb, he learned too late the maddening truth, that heaven at last deals out, with iron hand, that justice man defies!

Reader, on Charlotte's anguish drop a pitying tear! Her hopes lie buried in

THE PIRATE'S DUNGEON.

Note.—The Pirate's Glen and the Pirate's Dungeon are popularly known to our readers in Massachusetts as the scene of many of the incidents related in the preceding tale, all of which, with the exception of the introduction of the attachment of Veal, are founded on facts. The death of the pirate, Veal, (who had returned, it would appear, partially at least, to the paths of rectitude, and at the same time was exercising his trade of a shoemaker in his cavern home,) appears like a visitation of Providence, that may well be looked upon with awe when viewed in connection with his early history. The catastrophe that ended his life may, without great strength of imagination, be regarded as affording an appropriate moral to those whose false estimate of *crime*, as such, was alluded to in the commencement of the above tale.

OUR PEDESTRIAN CORRESPONDENT.

HALF-PAST THREE on Friday afternoon we again leave Keokuk for a tramp through another portion of the growing State of Iowa. It is very pleasant walking along the plank road; there is a pleasant breeze and very little dust. A few miles brings us in front of a large and tastefully built brick mansion, in fact the finest building we have seen for some time. Being anxious to know what it was we ventured our curiosity in a query, and by way of reply, were informed it was the county poor-house. Well, thought we, if the poor can afford to live in such a house as that, where will the rich go? The next thing that attracted our attention, was a whole row of one story log cabins, occupied by a number of pigs. These were the old poor-house, and poor enough they were too; winter before last the inmates came very near closing up their accounts with this world, from the effects of the cold and exposure. But there will be no such difficulty in the new house; doubtless many of the inhabitants of the county would be better off there than at their own homes. Hope none of them will feel insulted at this remark, knowing that some of them complained for want of room and many of them for want of money. It is very natural to conclude that board free in a large house would be acceptable and pleasant. Some distance farther on we saw a nice-looking one story frame house with some five or six (6) rooms; in one of which we saw refreshments, and so went in and while partaking of the landlord's hospitality, indulged in a little conversation, by which we soon found he was rather low spirited owing to the hard times and no business. Great change, said he, since I first came here about five years ago. Immigration to this State was immense then, and I did a good business here. Many a time I have had from five to eight hundred persons here in a day, all want-

ing something to help them on their westward journey, and all leaving some of their spare change; and often I used to keep five hundred here all night, but now I can lay on my lounge from morning till night, almost without interruption; the people have all stopped coming here from some cause or other. We listened to all this and much more from both sides, enjoying the comfortable seat more than the conversation. After bidding him good-bye and starting out, we looked back thankful we were not of the five hundred who were comfortably accommodated in that mansion all night. A few miles more brought us to the city of Boston, a very nice place. We did not stay to count the inhabitants as we wished to reach Charleston before stopping for the night. Charleston, like most of the Iowa towns, is built around an open square. As soon as the citizens become wealthy enough they fence in and improve their squares, but they first procure the ground while land is cheap, leaving the improvement for a more convenient season. Stopping at the old well in the square we took a good drink, and on looking around saw the Hoosier store, the Buckeye store, etc., etc. Such names are very common in this country. We were not long in selecting a hotel, and fortunately fell in with a good landlord and fared well. Next morning took an early start, before breakfast, and walked some miles before we saw any of the farmers at their work. They can make their living so easily on these fertile prairies that they get very lazy, and often do not get up in the morning till a Yankee farmer would have half of a day's work done. But the Yankee enjoys many luxuries they know not of, and if they enjoy their beds, we will not for one moment deprive them of them.

The prairie along here is beautifully rolling and very fertile; the vast, almost boundless fields of grain and grass, would bewilder the optics of a New-

England farmer, and cause him to wonder where all the people were who had prepared and guarded these numberless acres; as only a small shanty (in many places) is seen poking its roof above the high fences and tall grass and grain.

Shanties are not all the go along here. There are some very handsome houses, with large, well-built barns, and neat, tasty yards. We passed several very handsome places in the forty miles that lay between Keokuk and Salem. But they are the exception, and not the rule. Comfort, convenience and show, are minor considerations with the pioneer. His first object is to get his land enclosed and paid for, and by that time he gets so used to his old house that he would rather spend his first surplus money for more land than building a new one.

Labor-saving farming implements are much more common in this country than through the east. They could not farm the amount of land they do without them. Salem was the most important town on our route, which we reached early in the afternoon, and where we met with a kind reception and hearty welcome by an old acquaintance from the Quaker City, who lives in a very handsome place, with a beautiful yard, and every attachment necessary for the comfort and convenience of the proprietor. This being Saturday afternoon, of course we accepted an invitation to stay over Sunday; and a glorious time we had too. How nice it is to meet one's friends so far from home, in a strange land! What a rush of early recollections crowd the brain! Salem has its square fenced in, and the "fence whitewashed," paths are also made through it, and a number of trees set out, which give it quite the appearance of a city square. The city has a population of about nine hundred, and our informant said seven hundred of that number were children, and the other two hundred grown people. There are some very handsome dwellings in and around the

town, and some quite fine stores. In the evening we were introduced to some New-Yorkers who had been here several years, and had come to the conclusion that Salem was a very different place from New-York — that there were certainly many conveniences and luxuries to be had in the city of New-York that could not easily be obtained in Salem. That last remark we thought a very sensible one, and one that some years' experience had taught the author the truth of. Sunday morning was bright and beautiful. Of course when the time arrived we repaired to church and seated ourselves on the soft side of a board, and on looking around saw quite a different looking edifice from those in which your Fifth Avenue fashionables make their weekly displays. Do not think us sacrilegious, but we could not help feeling amused at the variety of costumes there assembled. Some relics of Eastern fashion along side of the pioneer garb from the surrounding country. No lack of entertainment; having colts, babies, and ministers in abundance. But here comes that nuisance, the last line, and so for the present we part, remaining yours truly.

BOOTS AT THE BOTTOM.

WHO ARE THE MUDSILLS?

THE Mudsills of Society, it has been said, are those whose sinewy arms sustain the social fabric. Without the artisan, how could any of the upper classes live, or enjoy the wealth that constitutes them of the upper ten? Let one of them, for instance, be placed with his thousands and his education, in the midst of a wilderness, without shelter, other than the blue canopy of heaven; without subsistence, save that which he can dig with his fingers from the earth. Around him are growing trees which can be wrought into comfortable dwellings; but he can not convert his money even into one insignificant ax, to fell them; and if he could, he would not know how to use it. He can not gnaw down a tree, as the beavers do, for nature has seen fit to adapt his dentals to a different purpose. There he is, look at him; homeless, shelterless, and alone. Heaps

upon heaps of gold are lying around him, and yet his gold can not bring him the simplest comfort. While he is wandering through this wilderness, he hears the sound of repeated and heavy blows. Rubbing his eyes, to convince himself that he is not dreaming, he travels on in the direction of the sound. Through an opening in the forest, he discovers a strange sight. 'Tis a "mudsill," at work with an ax upon a tree. Glad of society of any kind, he makes up to the spot. He asks the hardy pioneer what he is doing, and the reply is, "I'm about to build my cabin." And how will you do that? is the next query. "Wal stranger, arter this yer tree is down, I'll jist set that old saw to work; then, I reckin, I'll take them ar wedges and bust open the logs; arter that, I'll have a right smart chance of boards; then I'll get out my frame, and ef you'll call around this way about ten days from now, mebbly I'll show you what sort of a hotel I keep." The millionaire *must* have a house, even though it be of clapboards; so he will ask the mechanic, for what he will build him one. He tells him of his wealth, his ability, and willingness to pay for it. But the only bargain he can make with the individual who owns the tools, and has the knowledge of their use, is to give him every *peso*. Who is the Mudsill then? His education, before spoken of, is valueless under his circumstances, and his clapboard or log palace is unfurnished with any of the appliances to which he has been accustomed, and we may well imagine that he will lead rather a hard life in that settlement.

Other pioneers soon discover their retreat, and, as if by magic, there springs up a town, where, but a short time before, there were but two houses. The fallen millionaire can now employ his talents as a legal adviser, or a quack doctor; for laws will soon be found necessary, and medicines are also indispensable in highly civilized society; which, by the way, often breeds its own diseases. In either of the above ways he can gain some distinction, and win back a portion of his lost treasure. And as he grows wealthy through the quarrels or illness of his neighbors, he will increase in self-esteem, and lay claim to be the founder of the city, when, in fact, he was a wretched and homeless vagabond, without the knowledge of a decent digger Indian. The individual who charged

him the modest price of all that he was worth, to build him a house, will probably bring his family into the place, and, in process of time, "be gathered unto his fathers." And as his children become of age, they will discover, through the aid of a fashionable education and immensity of their father's legacy, that those who labor are the *Mudsills* of society. As they come upon the stage of action, most loudly will they howl of their patrician blood, and deny that their father ever labored, even for one single day to amass his wealth. Amass, did I say? He *stole*; for he meanly took the advantage of the necessities of a fellow-being, and shamelessly robbed him. How many such are there in California society, of humble origin, suddenly elevated, who have become inflated by the possession of wealth, to which they have been before unused, that seem to wish, by their bearing, to convey the impression to those around them, that they were "to the manor born," instead of from the dunghill.

In the settlement of this State, the social order was reversed, and he who could, and did, labor, was the proudest aristocrat; and even to this day, among us, the man who labors through the week, is more respected, and more worthy of it, than he who sports a glossy hat, dresses in the height of fashion, and gleans his living from the lunch tables of the rum-mills of Montgomery street. Wealth, the foundation of aristocracy is movable. To-day one man is the possessor of thousands, invested in inflammable property; to-morrow a mass of smoking ruins is all that is left to tell of his title to opulence. Another may invest in ships, and freight them with precious cargoes, and while he sleeps and dreams of fortune, his tempest-tossed barks may founder, and he be poorer than their builder. Yes, only he who labors that is independent, and above the changes that mercantile panic brings upon all who are within the circle of its destructive vortex; and only he is the aristocrat, who possesses the intellect to elevate and aid humanity, and consecrate himself unto that end. SOLTERO.

The remarks of our friend Soltero are too true, in those points where he speaks of those who have invested their wealth in inflammable matter, as the ruins of Nevada, San Andreas, and Mariposa too truly testify. We rejoice that a proper

feeling is being inherited in regard to the laboring classes; they are the only independent men now.

So says the editor of the *California Farmer*. Our say is, that the foregoing applies to other regions than California.

The men and women that know how to work will inherit the land. Those Irish girls now in our kitchens, and Yankee girls that work, are to be, if not the mothers, the grandmothers, of nearly all the wealth; and the men of this generation, who work at a useful calling, may count among their descendants the wealthiest men of this land. We put this upon record that posterity may see whether we are a false prophet.—Ed.

From the Michigan Farmer.

JENNY.

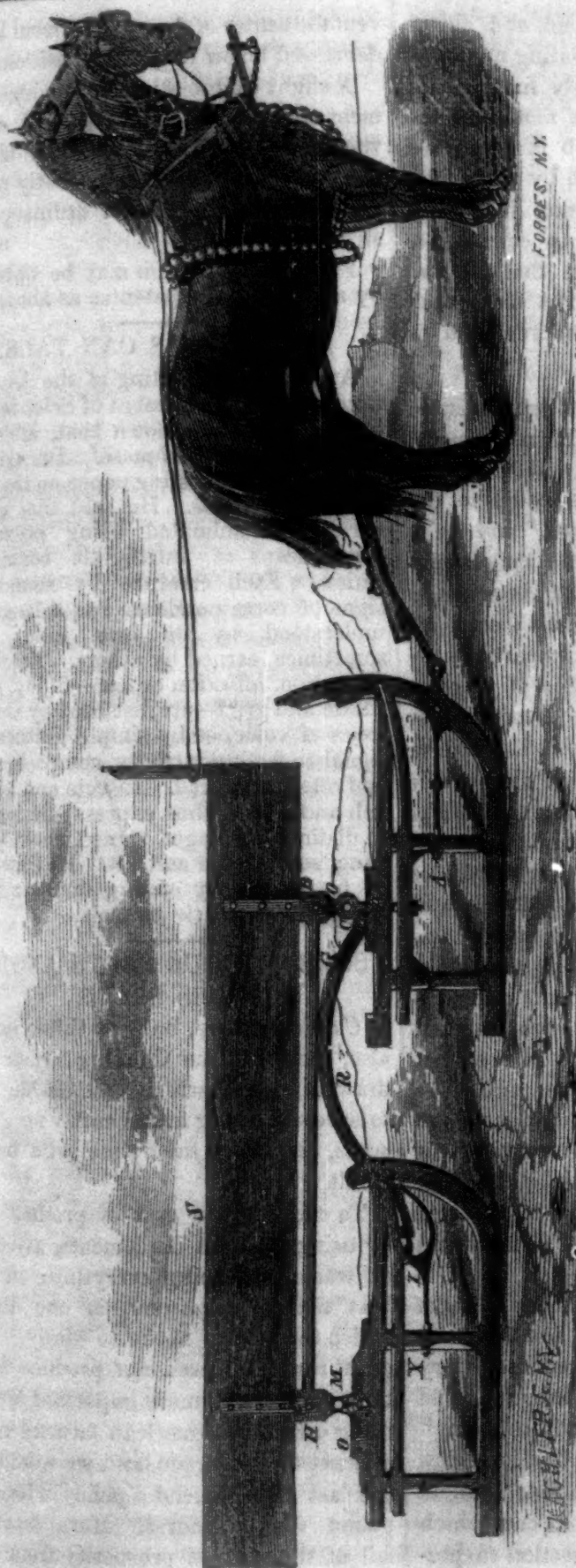
BY MRS. L. B. ADAMS.

Of all the farmers' girls I know,
And they, in truth, are many,
There's not among them one, I trow,
That can compare with Jenny.
Jenny, with her laughing eyes,
And her darkly braided tresses;
Jenny, with her fairy form,
And her dainty foot that presses
Lightly as the leaves that fall
On the grass from boughs above her:
Would that you my Jenny saw,
For you could not choose but love her!

She can spin, and knit, and sow,
With those fingers fair and slender,
She can mould the whitest loaves,
And bake them brown and tender.
And the cows at morn and eve,
For her coming look with pleasure,
Yielding to her skillful hand,
Richest milk in flowing measure.
At her call the lambskins run,
Down the clover paths to meet her—
For her care the garden blossoms
Send their sweet perfumes to greet her.

Never over her dear face,
Discontent its gloom is flinging;
As she sings as honey bees
At their own sweet work are singing.
In that little head she bears
Such a wondrous stock of knowledge,
That were I to tell you half,
You would think she'd "been to college."
But if I should sing a month,
Praising her above the many,
You would never be content,
Until you had seen my Jenny.

There may be scores of city girls,
Can boast of fairer faces,
And forms more shaped to fashion's mould,
Tricked out in silks and laces.
And useless fingers lily fair,
With gilded trifles playing,
And rosy lips, and languid eyes,
May tempt young hearts a-straying.
But if from these you turn aside,
A wiser man than many,
And seek a woman for your bride,
Perhaps you'll find my Jenny!



IMPROVED BOB-SLEIGH.

THE above engraving illustrates an improvement in hanging and connecting the bobs of Bob-Sleighs, for which letters patent were granted to John Hoyt, of Fishkill, N.Y., April 20, 1858.

The ordinary method of attaching the rear bob to the body of the sleigh by either a fixed joint, or by a joint that only permits the bob to have an oscillatory movement in a vertical direction upon that joint, involves the necessity of drawing it from that point of attachment, and requires more power to move the sleigh than if the rear bob were drawn from or near its front end, in consequence of the front end of the runner of the bob being pressed or pitched downward.— This means of attachment is used for the reason that a rigid reach to connect the bobs together would not allow the rear bob to have the movement required to enable it to follow the unevenness of the road or track. The improvement illustrated above remedies these objections, by connecting the two bobs together by a jointed reach which draws the rear bob

from, or near its front end, and allows that bob to have an oscillating motion in a vertical direction entirely independent of, and unaffected by the motion of the front bob. The rear bob is connected to the body of the sleigh by a double-cracked axle, which permits it to have a longitudinal movement to compensate for the different distances that the two bobs may be placed apart from each other in following an uneven road or track.

S is the body of the sleigh, secured to the cross bars H and B in the usual manner. A is the front, and X the rear bob. The former is connected to the cross bar B by "dog joints," and the T headed noddle pin P, (the noddle pin having a joint C attached to its rear side to which the jointed reach R is connected) which allows the bob to partially rotate on its center, to enable it to turn short curves, and to have a vertical oscillating movement to enable it to follow the sinuosities of the road over which the sleigh is drawn. The rear bob is connected to the cross bar H by the double-cracked axle M—the cranks of the cracked axle permitting the bob to have a longitudinal movement to compensate for the different distances between the two bobs incident to the different angles assumed by them in passing over a "rutty" or uneven road. R is the reach, connecting the two bobs together securely, yet allowing each to have an independent movement. It is connected to the front bob by the joint C in the noddle pin P and to the rear bob, at a point at, or near the front end of each runner, by the joint I. It is jointed together, between these joints of connection, by the joint J, to allow both of the bobs to have a free oscillatory movement in a vertical direction, and the rear bob to have in addition a longitudinal movement as described. It has a guard G attached to its rear section, which has a pin in its front end which rests upon the forward section to pre-

vent the center of the sections from being depressed below its proper position.

A slight examination of this improvement will afford convincing proof of its value, and that it remedies fully all the objections that are now so justly urged against the bob sleighs of ordinary construction.

Further information may be obtained by addressing the patentee as above.

ALL ANIMALS CAN TALK.

At an annual meeting of the Association for the Advancement of Science held in Boston, it was shown that, after all, there are no *dumb beasts*! Dr. Gibson read a very interesting paper on the *language of animals*. He said that every variety of animated being possesses some means of intelligible communication. Each creature by sounds or signs of correspondence has a language understood by its own kind, and sometimes earned by others. Emotions of caution, affection or fear—of joy, gratitude and grief—are disclosed by simple tones of voice, or by simple gestures to signalize feelings strictly comprehended and often answered. Insects and birds, fish and beasts thus express themselves in distinct languages, signed, spoken and sung, seen, heard and felt. He illustrated his theory by stating familiar facts relative to domestic animals.

SOME CURIOUS FACTS ABOUT GRASS SEEDS.

Curious we say, but we think *useful* also, such that the thinking farmer will draw inferences which will enable him to save something in his outlay for grass seeds, and at the same time get a better result.

To cheapen the cost of productions, by using the best implements, avoiding all waste, and doing everything in the best time and manner, is one thing which the farmer needs to study. We grant that the increase of produce from the same land, is more important, and a thing on which American farmers need oftenest to be jogged, and we would be the last to commend a penny wise and pound foolish course. More farmers fail of the highest prosperity from not

being sufficiently bold in their outlays, than from being foolishly extravagant.

Nevertheless, in growing farm produce, it may be well to look at the saving at one end of the operation, while we look at the gain at the other. Withhold nothing which gives you a fair prospect of enlarged profits. But, on the other hand, waste nothing. Unquestionably grass seed, up to the last penny-worth, that will give the best crop and make the richest turf, is the cheapest fertilizer you can buy.

But if eight dollars' worth of seed, rightly put in, is as good as ten dollars' worth slouched in any way the boys might choose to do it in a hurry, and if the extra cost of putting it in rightly—the stones and roots picked off, and the surface made into a proper seed bed—is not more than one dollar, then you gain a dollar by using the eight dollars' worth rightly, and not the ten dollars' worth in helter-skelter way, covering some beyond the probability of a resurrection, and leaving much to perish for want of root.

It is with these thoughts in mind that we copy the following, from the pen of Secretary Flint, of the Massachusetts Board of Agriculture. We do not advocate light seeding. Effective seeding is what we advocate. Secretary Flint, it will be seen, advocates heavy seeding; and we admit that it is safer to use too much than too little seed; for one cent saved by not applying seed enough, will cost the cultivator at least ten in the diminished value of the crop and the resulting turf.

It can not be too much considered that *turf is manure*. When you get a good thick turf, full of grass roots, over an acre, you have got 500 tons of manure on that acre, not as rich surely as the best barn manure, not half as rich, not a tenth part as rich it may be, yet very good for your purpose of growing crops; and you have not to pay for it by the pound; you have it not to transport;

you have not to spread it; it is already in the ground; it is spread with wonderful evenness, provided you put in your grass seed rightly; and you have only to plow it in, which is soon done with one of Nourse, Mason & Co.'s best.

But read the following, and then follow Sec. Flint's advice for heavy seeding, or ours for rightly seeding, or both, or neither, just as you like. He says;—

The following table, containing the weight per bushel of the seeds of the most important agricultural grasses, has been prepared chiefly from a valuable treatise on the grasses by the Messrs. Lawson, of Edinburgh, who have paid much attention to this subject, and whose experience and observation in the practical culture of the grasses has probably been larger and more extensive than those of any other seedsmen.

This table will be found to be exceedingly valuable for reference.

Column 1 contains the common names of the grasses.

Column 2, the average number of pounds in a bushel of the seeds.

Column 3, the average number of seeds in an ounce.

Column 4 shows the depth of soil in inches and fractions of an inch at which the greatest number of seeds germinate.

Column 5 shows the depth of soil in inches and fractions of an inch at which only one-half the seeds germinated.

Column 6 shows the least depth of soil in inches or fractions of an inch at which none of the seeds germinated.

Column 7 shows the average per centage of loss in the weight of the grass in making into hay, when cut in the time of flowering.

The weight of seeds varies, of course, somewhat, from that stated in the above table, according to their quality. Those given in the table are the average weights of good, merchantable seed. In some States, as in Wisconsin, for instance, the legal weight of timothy seed is forty-six pounds to the bushel. The weight of a bushel will depend in part, also, upon the thoroughness with which it is cleaned. The seeds of the different varieties of rye grass differ in weight, varying from twenty to thirty pounds per bushel; but the average is about twenty-six pounds.

Weight of Grass Seeds, and Depth of Covering.

1.	2.	3.	4.	5.	6.	7.
Whitetop.....	13	500,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to $\frac{3}{4}$	1	.65
Redtop.....	12	425,000	—	—	—	.63
Has-ock Grass.....	14	132,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1	2 $\frac{1}{2}$	.65
Meadow Foxtail.....	5	76,000	0 to $\frac{1}{2}$	1 to 1 $\frac{1}{2}$	2 $\frac{1}{2}$	.57
Sweet-scented Vernal.....	6	71,000	0 to $\frac{1}{2}$	1 to 1 $\frac{1}{2}$	2	.45
Tall Oat Grass.....	7	21,000	$\frac{1}{2}$ to $\frac{3}{4}$	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	4	—
Slender Wheat Grass.....	10	15,500	0 to $\frac{1}{2}$	$\frac{1}{2}$ to $\frac{3}{4}$	2	—
Crested Dog's-Tail.....	26	28,000	—	—	—	—
Orchard Grass.....	12	40,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1	2 $\frac{1}{2}$	.29
Hard Fescue.....	10	39,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1	2 $\frac{1}{2}$	—
Tall Fescue.....	14	20,500	0 to $\frac{1}{2}$	1 to 1 $\frac{1}{2}$	2 $\frac{1}{2}$	.52
Sheep's Fescue.....	14	64,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1	2	.63
Meadow Fescue.....	14	26,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1	2 $\frac{1}{2}$	.60
Slender, or Spiked Fescue.....	15	24,700	—	—	—	—
Red Fescue.....	10	39,000	—	—	—	—
Reed Meadow Grass.....	13	58,000	$\frac{1}{2}$ to $\frac{3}{4}$	$\frac{1}{2}$ to 1	2 $\frac{1}{2}$	.30
Common Manna Grass.....	15	33,000	—	—	—	.35
Meadow Soft Grass.....	7	95,000	$\frac{1}{2}$ to $\frac{3}{4}$	$\frac{1}{2}$ to 1	2 $\frac{1}{2}$	.73
Italian Rye Grass.....	15	27,000	0 to $\frac{1}{2}$	1 to 1 $\frac{1}{2}$	3 $\frac{1}{2}$	—
Perennial Rye Grass.....	18 to 30	15,000	$\frac{1}{2}$ to $\frac{3}{4}$	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	3 $\frac{1}{2}$	.50
Millet Grass.....	25	80,000	$\frac{1}{2}$ to $\frac{3}{4}$	1 to $\frac{1}{2}$	2 $\frac{1}{2}$	.38
Reed Canary Grass.....	43	42,000	—	—	—	.32
Timothy.....	44	74,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1	2	.50
Wood Meadow Grass.....	15	173,000	—	—	—	.31
June, or Spear Grass.....	13	243,000	—	—	—	.57
Rough-stalked Meadow Grass.....	15	217,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to $\frac{3}{4}$	1 $\frac{1}{2}$	.72
Beach Grass.....	15	10,000	$\frac{1}{2}$ to 1	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	4	—
Yellow Oat Grass.....	5 $\frac{1}{2}$	118,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1	2	—
Red Clover.....	64	16,000	0 to $\frac{1}{2}$	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	2	—
Perennial Clover.....	64	16,000	0 to $\frac{1}{2}$	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	2	—
White Clover.....	65	32,000	0 to $\frac{1}{2}$	$\frac{1}{2}$ to $\frac{3}{4}$	1 $\frac{1}{2}$	—
Lucerne.....	60	12,600	—	—	—	—
Sainfoin.....	26	1,280	$\frac{1}{2}$ to 1	2 to 2 $\frac{1}{2}$	4 $\frac{1}{2}$	—

The number of seeds of each species in a pound, may be found, of course, by multiplying the numbers in column three by sixteen, the number of ounces in a pound. It is obvious, however, that these numbers must vary, like the number of pounds in a bushel, for it is evident that the lighter the seed, the greater will be the number of seeds in a pound. The numbers stated are the average obtained by careful and repeated trials. The results obtained in columns 4, 5 and 6, were obtained by careful experiment, and will be found to be very suggestive.

The fact that the soil used in the experiments to ascertain the proper depth of covering was kept moist during the process of germination, though freely exposed to the light, accounts for the large number of seeds germinated without any covering whatever. In ordinary field culture some slight covering is desirable; but the figures in column 6 show the important fact that in our modes of sowing and covering there must be a great

loss of seed from burying too deep, though the depth should be governed somewhat by the nature of the soil, as its usual moisture or dryness.

I have already expressed my opinion that we limit our mixtures to too few species, thus failing to arrive at the most profitable results, and have said that, in a piece of land seeded with one or two favorite grasses only, small vacant spaces will be found, which, in the aggregate will diminish very considerably the yield of an acre, even though they may be so small as not to be perceived. It might be thought that this could be avoided by putting into the ground a very large number of seeds. But a knowledge of the quantities of seed ordinarily used in this State for sowing, and an inquiry as to the number of plants necessary to cover the ground with a thick coating of grass, will show that this is not the case. I have in my possession letters from some of the best farmers in Berkshire, Plymouth and other counties of the Commonwealth, in which they state it to be

the prevailing practice to sow a bushel of redtop, a half bushel of timothy, and from four to six pounds of red clover to the acre. Some of them vary the proportions a little, as by the use of one peck of timothy and a larger quantity of clover, but the general practice is to use nearly the quantities stated, some even using a considerably larger quantity. Now if we examine the table we shall find that in an ounce of redtop seed there are 425,000 grains. In a pound there are 6,800,000 seeds; in a bushel, or twelve pounds, there are 81,600,000 seeds. Now take only one peck of timothy seed to mix with it. In an ounce of timothy grass seed there are 74,000 grains. In a pound there are 1,204,000 grains. In eleven pounds, or a peck, there are 13,244,000 seeds, and if we take but four pounds of clover, which is below the average quantity used, we shall find by the same process that we have 1,024,000 seeds. If now we add these sums together, we shall find that we have put upon the acre no less than 95,868,000 seeds! This gives over 15 seed to the square inch, or about 2,200 seeds to the square foot!

Again, one of the most intelligent farmers of Middlesex county, a practical man, uses five pecks of redtop and twelve quarts of timothy seed per acre, for mowing lands, and an addition of five pounds of white clover for pastures, making no less than 124,426,000 seeds per acre. There must be, evidently, an enormous waste of seed, or an extensive destruction of plants, for if we take nature for our guide, we shall not find anything like that amount of plants on an inch or a foot of our grass lands.

ECHOES OF THE VALLEY OF LIFE.

HEAR the story of the child that went forth into the mountain ravine. Whilst the child wandered there he cried aloud, to break the loneliness, and heard a voice which called him in the same tone. He called again, and, as he thought, the voice mocked him again. Flushed with anger, he rushed to find no one. He then called out to him in anger, and with all abusive epithets, all of which were faithfully returned him. Choking with rage, the child ran to his mother and complained that a boy in the woods had insulted him with many vile words. But the mother took her child by the hand and said—"My child, these names were but

the echoes of thine own voice. Send forth sunshine from thy spirit, and thou shalt never have a clouded day. Carry about a vindictive spirit, and even in the flowers shall lurk curses. Thou shalt receive ever what thou giveth, and that alone."

What a sad mistake it is to suppose that a good man should be gloomy because he is devout. A good man is always a cheerful one. It is fit that bad men should scowl, and look blue, and be melancholy; but he who has God's smile of approbation upon him, should show its radiance upon his countenance. An honest man—the man with a good conscience—let him enjoy his sleep and his dinner, and the love of his wife, and the prattle of his children, and show a beaming face to his neighbor. There is no worse theology than that He who has given such fulness of joy to beasts and birds, delights in the misery of men.

HOW TO STOP BLOOD.

TAKE the finest dust of teas, or the scrapings of the inside of a tanned leather, and bind it close upon the wound, and blood will soon cease to flow. These articles are at all times accessible, and easy to be obtained. After the blood has ceased to flow, laudanum may be advantageously applied to the wound. Due regard to these instructions will save agitation of mind, and running for the surgeon, who would probably make no better prescription, if present.

From the New-Jersey Baptist.

TRUE HAPPINESS.

THERE is a flower by worldlings sought—

Alas, their search how vain!

A flower whose fragrant breath inhal'd,

Shall banish care and pain.

It blooms not in the court of wealth;

Ne'er decked a monarch's crown;

Lifts not its petals in the path

Of glory and renown.

There is a realm where this rare flower

Blooms in perennial grace;

Seekers there are who'll find it there,

When they have "won the race."

Christians, these humble seekers are,

To them it shall be given;

It blooms not in the wilds of Earth,

Its native soil is HEAVEN!



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IS ALL GOLD-THAT SHINES?

THE cut on the opposite page represents a beast modeled about after the English idea of perfection—the body a regular parallelogram, thicker behind than before, like a truncated wedge, back straight from the falling off of the forehead to the bend of the tail, short horns or no horns, eye rather dull and disposition calm as a summer's morning. By pairing for the purpose, and with sufficient time, say half a century, it would be possible to bring all the cattle of any country to that form; but would it be desirable. We think not. Give us rather the round plump form. It is more favorable to strength. The vital energy is greater. By the time you have brought a race of cattle to the perfection of form represented in the opposite page, if it can be called perfection, you have destroyed half the vitality, and the race is ready to deteriorate more rapidly than it was improved. Statistics of the mortality of herds of such cattle in England prove this beyond a doubt. Cattle well cared for ought not to die except by the butcher's knife, and yet there are three dairies of just such formed cows as this, in which the mortality is at the rate of 3 per cent a year. In New-England dairies we do not believe it is half of one per cent.

THE CROPS.

A CORRESPONDENT from Central New-York says:—"The growing crops look finely here. Corn has not looked so well for many years back as it now does at this season of the year. Grass is fine, and is being cut all through the country. Spring wheat looks finely."

THE PROSPECT.

We have probably never witnessed so uniformly fine crops anywhere, as we have seen in our recent travels throughout the State of New-Jersey. At the west, nothing but fields of wheat, corn, rye, potatoes and timothy meet the eye. While down in Monmouth county and

its surroundings the same is manifest. Just enough rain has fallen, and just at the right time. On account of the failure of the wheat crop last year, very few fields have been sown this; but those which have, surpass anything we have seen for many years. A few weeks since, a terrific hail storm about one mile in breadth swept through the county, taking in its course Hamilton Square, and moving in a south-easterly direction. Considerable damage was done. The Strawberry crop was very prolific in that region; but at the market prices of this season, we should judge that the picker realized more than the grower!—*New-Jersey Baptist*.

THE CROPS AT THE WEST.

ILLINOIS papers state the wheat in many parts of that State has been badly rusted. Many fields over large sections are also found to be blasted, probably by the beating rains while in bloom. It is therefore probable that in Iowa and the northern half of Illinois, wheat will be hardly half a crop. In Southern Illinois wheat was a good yield, as well as in Central and Southern Indiana. In Wisconsin the prospect is now very fine, the wheat being later and ripening under the present good weather. Corn is coming on well in all parts of the country, and high hopes are now entertained of a heavy crop. Oats are a light crop in Indiana and Illinois. Accounts in regard to barley vary greatly, as it is doubtless much injured to the south and southwest. The Indianapolis (Ind.) *Sentinel* thinks that, on the whole, the crop of wheat in that State will exceed that of last year. In Laporte county alone it is estimated there will be a surplus of 700,000 bushels for shipment. The grass crop is fine all over the State. Oats are unequal; in some localities an average crop, while in others there is almost a total failure.—*N. Y. Herald*.

Blobbs says that the "grab-bag" system carried on at ladies fairs where a shilling a grab is charged for the highest price, valued two cents, always reminds him of the shrewd colored individual who issued \$4 75 in shin-plasters, payable when presented in sums of five dollars.

That darkey should be made a bank director. (Certainly.)

ACTIVITY OF INVENTORS.

THE *Scientific American* says:—The warm weather does not depress the genius of our inventors, as we can testify from the business of our own office. During the week ending July 17, we have filed from this office, exclusive of cases filed by our branch office at Washington, THIRTY-FIVE applications for patents.

THE BLACK CURRANT.

BLACK currants require quite a different system of pruning from the other varieties; the great point to aim at is to get as much young wood as possible every year from the lower part of the tree. This is increased by thinning out the old wood from the bottom, and the finest fruit is obtained from the young wood. In striking the black currant you should select young shoots about ten or twelve inches long, insert them in the ground, with the buds on about six inches. The buds of the other sorts are rubbed off except about four, which are left on the portion out of ground. I have black kinds struck on the same system, but never lasted long; they died off limb by limb about the time they ought to make good trees. They like a moisture-holding soil; if planted on high ground they suffer much in hot summers. Red and white sorts like a lighter soil; they produce their fruit from spurs on the old wood. In pruning, cut a portion of the young wood back every year, and thin according to the growth of the tree.

WELL MEANT, BUT NOT WELL SAID.

WE believe that if our farmers would bestow the manure and labor upon thirty acres which they now bestow upon sixty, they would harvest heavier crops, and be richer every way at the end of the year.—*Ark. Pioneer*.

Thirty acres! Yes, and that's too much for a man who has'nt force enough to cultivate five. But if you are conscious of a tolerable share of energy, and are devoting your life to farming, don't stop on thirty acres. Have a hundred at least. Labor yourself, and command labor, and put the whole under such a cultivation as will do honor

to your head, and fill your pocket, and make you a man in the presence of your fellows of other callings. That is the way. We dislike advice that would make two-penny men of all the farmers in this glorious country.—Ed.

LOSING ALL—A FAMILY SCENE.

THERE is something exceedingly beautiful, as well as instructive, in the following incident in the life of an unfortunate merchant:

A few years ago a merchant failed in business. He went home one evening in great agitation.

"What is the matter?" asked his wife. "I am ruined; I am beggared. I have lost my all!" he exclaimed, pressing his hand upon his forehead as if his brains were in a whirl.

"All," said his wife; "I am left." "All, papa!" said his eldest boy; "here am I." "And I, too, papa," said his little girl, running up and putting her arms around his neck. "I's not lost, papa," repeated Eddie. "And you have your health left," said his wife. "And your two hands to work with, papa," said his eldest; "and I can help you." "And your two feet, papa, to carry you about." "And your two eyes to see with, papa," said little Eddie.

"And you have God's promise," said the grandmother. "And a good God," said his wife. "And a heaven to go to," said his little girl. "And a Jesus to come and fetch us there," said his eldest.

"God forgive me," said the poor merchant, bursting into tears. "I have not lost my all. What are the few thousands which I have called my all, to those more precious things which God has left me?" and he pressed his family to his bosom, and kissed his wife and children with a thankful heart.

Ah, no, there are many things more precious than gold and bank stocks, valuable as those may be in their place. When the Central America was foundered at sea, bags and purses of gold were strewn about the deck, as worthless as the merest rubbish. "Life, life!" was the prayer. To some of the wretched survivors, "Water, water!" was the prayer. "Bread, bread!" it was worth its weight in gold, if gold could have bought it.

The loss of property must not cloud

the mind with a wicked forgetfulness of the great blessings which are left behind. No man should despair, for no man has lost his all until he has lost his integrity, lost the mercy of God, and lost his hope of heaven at last.

SORGHO, OR CHINESE SUGAR CANE.

THE Paris correspondent of the *Journal of Commerce* says that the sorgho, or Chinese sugar cane, which has attracted so much attention, formed a prominent feature in the late annual agricultural exhibitions of France. This plant is extensively and successfully cultivated in the south of France and in Algeria; and as an evidence of the extent and variety of the application of its material, we may mention that at the late exhibition at Avignon, M. Prieur exhibited a group of samples illustrative of the metamorphoses to which he has subjected it. Nothing could be more curious than the succession of transformations there shown. In one corner could be seen the sorgho in stalk, such as it is when cut; a little further, were its fibres converted into thread, in skein; then a piece of linen woven with the thread; then a handsome cloak, bordered with furs, which M. Prieur designs for the Prince Imperial.

The most curious and complete array of the products of the sorgho, however, at the same exhibition, was that of Dr. Sicard, of Marseilles. With the pith he has manufactured excellent sugar, which will favorably compare with any other whatever. By grinding the seed he has obtained flour and fecula, of which he has made bread and chocolate, which the many tasters have found palatable. He extracts, moreover, from the plant, an abundance of alcohol of superior quality, and besides, a most agreeable wine, containing in large quantities all the tonic and other salutary elements of the juice of the grape. In addition, he makes paper out of it, of which he showed evidence in superior samples; by chemical agents he gets from it gamboge, ginseng, carbon; skeins of cotton, wool and thread dyed with sorgho in those delicate and varying shades which hitherto have been found only in the stuffs and articles coming directly from China. We should add that the new derivations (as we may style them) from the cane are complete, and can be de-


livered to trade and industry at determinate prices.—*Scientific American.*


"SPIRIT ISLAND."

THE Mississippi river, at the Falls of St. Anthony, including the rapids, has a descent of thirty-one feet, and affords the finest water-power in the world. Just below the principal cataract there is a little rocky island, covered with cedars and enshrouded with spray, called the "Spirit Island." Among the red men there are many legends associated with this spot. I can give but one.

A mighty hunter among the Dacotahs, with his beautiful bride, Ampota Sampa, once lived in their lodge near this place. For years they were happy together in their wigwam home. As was common among the Dacotahs, her husband, at the suggestion of other chieftains, concluded to marry a second wife, as it was thought dishonorable for so great a warrior to have but one wife. Ampota was sad when he made known his intentions, and did all she could to dissuade him from such a purpose, but he was fixed, and the following day the new bride was brought home to their lodge.

The next morning the discarded Ampota was missing. A death-song was heard on the Mississippi. The alarmed husband rushed from his wigwam, and saw a canoe, with a woman and two children in it, gliding swiftly down the rapids just above the falls. It was Ampota and her children. She was sitting calmly singing her death-song, and charging him with her ruin. He tried to rescue her, but it was too late; the angry waters bore her down the rapids and over the falls into the fearful gulf below. Their bodies were never recovered, but tradition says that oft the spirits of the Indian wife and her children, in their canoe, may be seen about the "Spirit Island."

 **DRYING BLACKBERRIES.**—Place them in a hot oven, until they are thoroughly heated. Lay newspapers on your drying scaffold, spread the berries thinly on it, and dry thoroughly.

 **DRYING RASPBERRIES.**—Spread the berries on earthen plates, place them in a hot oven until they are scalded; then turn them on drying boards, or hurdles and dry in the sun.

A NOVELETTE.

Founded on facts ; not about boys and girls, men and women, sighing breezes and terrible storms, lasses, sweethearts, fine beaux, auburn haired misses, cruel daddies, relentless mammies, uncles with a fortune, aunts with wrinkles, hags, elfs, spirits, courting, loving, marriage, cherubs, jealousy, fighting, killing, dying, and all that, but on the more homely subject of

A BIG PAIR OF CATTLE!!

If the conductors of some of our weekly, story-telling papers, knew how much love and murder we could work into a story not more than a rod long, and how many rosy-faced lovelings we could manufacture to order out of marriages against the old folks' consent, we have not one doubt they would buy us off from the farmers—if they could—at a price ten times greater than we expect to get by serving them. But it's not to be so. We are not vendable. Our subject is a pair of big cattle.

It came about in the reign of James III., some twelve years since, in our native town of Conway, Mass.—we suppose that gentle zephyrs were sighing among April flowers, at the time, but do not positively affirm that, and it is probable that stars of silvery splendor were looking down from heaven—that two great calves were born. It is no disgrace to one of the bovine race to have been a calf once, though it is not quite respectable for a specimen of the species *homo*, to be one always.

The town of Conway is on the western slope of the Connecticut, eight or ten miles from that beautiful river. It seems to have been made in a hurry, of hills large and small, pitched together, after no pattern that exists elsewhere; and its surface may be represented by that of a load of pumpkins, great, medium, and small, some whole, some broken, dumped from a farmer's cart. Such mountains, hills, ledges, ravines, precipices and slopes the reader has hardly seen if he has not been there. There is

scarcely a level spot, in the whole township of some forty square miles, large enough to play a game of ball upon. It was settled about eighty or ninety years ago, mostly by people from the region of Cape Cod. Almost every settler had commanded a coasting vessel or a fishing smack, and of course was a captain, unless, as the military spirit was then rife, he had modestly yielded to the will of his compeers, and taken a higher title. There were plenty of generals, colonels, and majors of militia, and a great many deacons, for they were a religious people, spiced with a little of the bigotry of the times, but as well meaning, kind hearted, sober minded, sensible people as ever came together; and, what is remarkable, their descendants have not degenerated a whit. That there is some of the old Adam among them, as shown in occasional jealousies, envyings, and backbitings, is too true. But then there is less there than anywhere else. They are a remarkably *nice* people, not as compared with what they should be, but as compared with the world outside of their geography. It troubles us sometimes, as we remember, that we were born among such a people, and yet are no better.

Conway has always been a remarkably good grazing town. The butter, and cheese, and beef, made there, never hurt any one, unless he ate too much of them. The rivers running among those hills now turn a good deal of machinery. Consequently the farmers have a home market. In the olden time every man was a farmer. The minister drew from a hundred acres; the lawyer (there was not much law business to do) had the best farm in the town; the doctor had the next best. Everybody had farm produce to sell, but alas! for a buyer. Then it was that the farmer would carry his fatted calf twelve or twenty miles to a petty market, and exchange it at two or three cents a pound for India cotton at fifty cents a yard. The minister's

salary, it should be noted, was \$333.333 a year, but he had a good farm given him to start in life with, and then the ministers were nabobs, as compared with those of present times, and could live in spite of their people, if the latter became captious and dismissed them.

But it is time we should be approaching the birth of the illustrious subjects of this story. The reader should understand that our fathers took great care for the church and the schools. In that town, that strict justice might be done to all, the church was built in the geographical center. This was surrounded by at least seven hills. You could not see out. Thither the farmers came, not occasionally of a Sunday morning, but every Sunday morning, on horseback, with their wives on pillions behind them, and generally a baby or two before, relieved from the pummel of the saddle by a pillow. The hired man and the sturdier of the farmer's sons walked to church, often, for economy's sake, carrying their stockings and shoes in their hands, till in some sly nook near the church they would put them on.

The truth undoubtedly was, that they expected to be seen of men, and women too, and their shoes, all greased up to shine like the outside of a pot, would have become dingy if they had worn them all the way through the dust. The smaller boys often rode on horseback, with a sister behind, and often a younger brother before, all clasped lovingly together. These were said to be good times, and we believe it. All carried a lunch, that they might not worship God without a proper care for the innerman. Saturday evening was regarded as holy time. The important business of *courting* was done Sunday evenings; and there was good sense and economy in that, for the parties would come together with the greater zest after the sly looks and blushes across the church, and then the Sunday clothes were already on, and would not be soiled by

more than one day's wear in a week. Clothes were a precious affair, when it took ten pounds of veal, or two or three of butter, to pay for a yard of calico, that was nothing to brag of. The valley in which the church stood was called Pumpkin Hollow.

But we never shall get to the cattle at this rate. That good town was divided into about fifteen school districts, in which were employed as many masters in winter, and as many marms in summer. It not unfrequently happened that the marm was a beautiful girl of sweet sixteen, but then the older boys were kept at home to work in summer, which was all the safer for them. Three months in summer to a marm, and three in winter to a master, our fathers thought was enough; and they were right; we should have more great scholars if we let our children be in school one-half of the year, and work or play, as befits their age, the other half. All these school districts had a curious name. That in which we used to receive the marm's caresses, and sometimes the master's birch, was called Cricket Hill. Among them was a Shirkshire, a Broomshire, a South End, a West Side, a Hard Scrabble, a Hoosick, a Wisdom, and too many others to remember. Wisdom was the district in which our large calves were born. Whether they knew more, or grew faster for being born in that wise corner of the town, is more than we know, but one thing is certain;—they found better pasturage than can be found almost anywhere else. Descended from an illustrious Durham of huge proportions, and from large, bony mothers, of the native breed, much was expected of them. They were fed on milk and Indian meal, had the best of pasture in summer, and plenty of June cut hay in winter, were broken early to the yoke, and used kindly as working oxen till six years old, fattened on half a bushel each of Indian meal per day, with as much hay or grass feed as they would consume

for about two years, became monsters, and were the lions of the country round. We went twelve or fourteen miles to see them in the winter of 1834 or '5—don't certainly remember which—and were told by the owner that a few weeks before they weighed five thousand nine hundred and odd pounds, and that at the same rate of increase, as they had before shown from time to time, they would then weigh just about six thousand pounds, live weight. Although a tall man, as most of the sons of these early settlers in that good town are, we almost needed to climb a hay mow to see them; and it seemed as if a small company of boys might play a game of foot ball on the back of either, without much danger of going too near the edge. They were well formed, and enormously fat. About that time a gentleman in New-York bought them, (we believe, but are not certain, for \$1000.) They were brought here, and kept some time as a show, with what profits to the showman, or whether Barnum was the man, we have not learned. The point to which we call attention is, that they weighed, standing in the scales, with the yoke on, after their usual feed and watering, six thousand pounds; and were looked upon as a wonder by everybody. We had never seen their equal in that line, and were a little proud that they should hail from our own State, county and town. But here is the moral; alas for our plumes! Maine has beaten her old mother, Massachusetts, all hollow in big cattle this half a century, if stories say true. A Maine man, now in this city, has handed us an article to show that such cattle as we have described are hardly a consideration compared with many that have been grown and fattened in that State. His accounts are so large that we dare not publish them, whereupon he promises to have ready for our September No. affidavits and testimonials from the best men in that State to confirm every word,

on which condition we promise to publish his article, with the affidavits and testimonials. Our readers, therefore, may expect a bigger cattle story in our next than we give in this, and backed up with the best evidence of its truth. This is as large a story as we dare tell on our single responsibility. We vouch for its accuracy, as to the origin, manner of growing, and weight. Our tale is *founded on facts*. We will add, that several Maine men, now in this city, express their belief that the writer of the rejected article will make his promise good—to verify every word of a much larger story than we have now told.

A SHORT TRIP BRIEFLY TOLD.

THAT Long Island land—the "Barrens," so called—we now see why the accounts of it have differed so widely, some putting it down as good for nothing, and some worse even than that, while others trumpeted it as remarkably good land.

Till the beginning of this month, we had seen it only at railway speed, and we judged that, as commonly happens, the truth lay about half way between the extremes. We said we will know more about a matter of so much importance as two or three hundred thousand acres of good land, or no land, or half way between, within three hours of this city, and under as fine a climate as the world presents.

We jumped into a car; went to the center of Long Island; with spade in hand, not having forgotten how to dig. We went over and about several thousand acres, and tried for depth of the soil, and its character so far as can be judged by the eye, and at the same time carefully observed the crops on the few openings that have been made, and ascertained the modes of culture, and the manures used to procure them.

Space does not allow us now to state particulars. But we will give the con-

victions of our own mind, and may at another time state the grounds on which they rest. (1.) That soil—very unique, over large tracts—is *not* what it has often been said to be, a *coarse sand and gravel*. That impression has been created by the fact that all over this territory are roads, crossing each other at every possible angle, and running in all directions, made for the convenience of the coast towns, not by professional road makers, but simply by 225 years wear of wheels, and washing of rains. As the ground is not level, but rolling, prairie fashion, the soil has been washed from the higher to the lower places, by little and little, for more than two centuries, wherever these roads run. The higher places are thus cut down two, three, and three and a half feet, and in sudden falls of rain the coarse sand and gravel, not of the soil, but of the sub-soil, have washed out, and to some extent have been deposited on the surface in the lower places. The construction of the railroad has heightened the effect; and the people on the north and south shores, though unquestionably as good as the rest of the world, have not always hesitated to run down their neighbors' goods, that they might sell their own. When New-York merchants get too rich to live longer in the city, these coast people like to have them in their own neighborhoods, along the shore, which is an important fact in this connection, and goes far to explain the low opinions which have been heralded concerning the central part of the Island.

But if this land is not, as interested neighbors to the north and south have said, and as it appears to a superficial observer, a coarse sand and gravel, what is it? (2) It is, beginning with the sub-soil, a vast accumulation of grit—sea-sand and gravel—sufficiently cemented at the top to afford a solid substratum for the real soil to rest upon, and yet porous enough to afford a perfect underdrainage. No land was ever as perfectly

drained by the art of man, as this is by nature. Now all this grit is useless for purposes of cultivation, except so far as it serves to hold the world together and to hold up the real soil. The real soil, in this case, is a fine, easily worked, beautiful loam, of at least fair productive powers, averaging 15 or 18 inches in depth, but strange to say varying in thickness with the height of the land, so as to be 36 and often 40 inches thick on the swells, and from that down to 6 or 8 inches in the valleys.

This last fact astonished us. We know nothing how to account for it. We had before heard it asserted, both by interested parties and by geologists in their surveys; but we had always set it down as a wish or a fancy; and never would believe a word of it, till we had seen by a personal examination that it was so.

The truth is, beyond all question, these "Barrens" are pretty good land; and lying, as they do, within two and three hours of this city, on a well conducted railroad, they will pay well for cultivation.

We have no hesitation in advising those seeking for places, in which to make for themselves country homes, to look on Long Island, and as well along the central regions as near the shore.

STATE AGRICULTURAL SOCIETIES.

Times and places of holding the Shows, Fall of 1858, with the names of the Corresponding Secretaries.

United States, B. Perley Poor, Cor. Sec., Washington, D.C.; Richmond, Va., Oct. 26 to 29.

Alabama, Dr. N. B. Cloud, Cor. Sec., Montgomery; Montgomery, Oct. 18 to 22.

California, O. C. Wheeler, Cor. Sec., Sacramento; Marysville, Aug. 23 to 28.

Connecticut, Henry A. Dyer, Cor. Sec., Brooklyn; Hartford, Oct. 12 to 15.

Georgia, (S. Central) Jas. Camak, Cor. Sec., Athens; Atlanta, Oct. 10 to 23.

Illinois, S. Francis, Cor. Sec., Springfield; Centralia, Sept. 15 to 19.

Indiana, John B. Dillon, Cor. Sec., Indianapolis, Oct. 5 to 7.

Iowa, I. H. Wallace, Cor. Sec., Muscatine; Oscaloosa, Sept. 28 to Oct. 1.

Kentucky, R. W. Scott, Cor. Sec., Frankfort; Louisville, Oct. 5 to 8.

Maine, E. Holmes, Cor. Sec., Winthrop; Augusta, Sept. 21 to 24.

Maryland.

Massachusetts, R. S. Fay, Cor. Sec., Salem.

Michigan, J. C. Holmes, Cor. Sec., Lansing.

New-Hampshire, I. C. Wingate, Cor. Sec., Dover, Oct. 6 to 8.

New-Jersey, W. M. Force, Cor. Sec., Trenton; Trenton, Sept. 14 to 17.

New-York, B. P. Jones, Cor. Sec., Albany; Syracuse, Oct. 5 to 8.

North Carolina, Wm. D. Cook, Cor.

Sec., Raleigh, Nov. 2 to 6.

Ohio, J. H. Klippart, Cor. Sec., Cincinnati; Sandusky, Sept. 15 to 19.

Pennsylvania.

Rhode Island, Wm. K. Staples, Cor. Sec., Providence, Sept. 28 to Oct. 1.

South Carolina, R. J. Gage, Cor. Sec., Columbia, Nov. 9 to 12.

Tennessee.

Vermont, Chas. Cummings, Cor. Sec., Brattleboro'; Burlington, Sept. 14 to 17.

Virginia, Petersburg.

Wisconsin, D. J. Powers, Cor. Sec., Madison; Madison, Oct. 5 to 9.

Canada West, Geo. Buckland, Cor. Sec., Toronto; Toronto, Sept. 28 to Oct. 1.

Canada East, Montreal, Sept. 28 to Oct. 1.

CHILDREN'S CORNER.

GRANDPA'S LETTERS TO BOYS.

WE have received from a distant correspondent, whom we have never seen, but wish we could, a *short* series of *short* letters to boys, of which we publish the Introductory letter below. We shall publish the others from time to time, if we find that they interest our readers, as we believe they will. Boys, we believe, like short articles, but the shortness of these will not be their best quality.

LETTER I.

DEAR BOYS:—As I am an old man, and do not expect to see you as often as I could wish, I have concluded to write you some letters on subjects in which I know you are particularly interested, and all I ask in return for my labor is, that you give them a careful perusal, and endeavor to profit by them.

But I suppose you want to know who I am, where I live, what my occupation, etc. Well, these are all proper questions, and it is right that I should tell you something about myself. I am an old man, old enough for your father, and perhaps for your grandfather. Of course I have seen a great deal more of

the world, and have more experience in a great many things, than you have. But I was once as young as you are; and when I look back on my past life, I can see a great many things which I could wish were altered, and if I could live my life over again, and had the knowledge I now have, I would act very differently, in many respects, from what I have done. I have often thought it strange that young people, particularly boys, do not profit more from the experience of others. It is not to be supposed that boys know how to act as well as older people—we do not look for old heads on young shoulders—but it seems to me, when they are told how to act, they ought to take advice, and do as they are told, and if they do not, they are certainly without excuse.—What would you think of a boy who had lost his way in a dangerous wood, infested by fierce and ravenous wild beasts, and every step he took was only exposing him to more imminent danger; and some friends should meet him and tell him of his danger, and entreat him to return, and even propose to lead him in the right way; but he was so foolishly obstinate that he would take

no advice, but go on in his wayward course, until he became a prey to the prowling beasts of the forest? Would you consider him wise? Would you not say that he acted a very foolish part? No doubt you would, and you would judge correctly. But what would you think if we could prove that all boys, who will not be advised by the experience of others, are acting a part no wiser or safer than this lost boy? Do you think you would act so imprudently? No, I hope not; I have a better

opinion of you; for I hope you will take advice, as you think wise boys ought to do, or as you will wish you had done when you come to be older.

But perhaps I have said enough for you to read and think about for one time. I know boys generally do not like to read very long pieces; therefore I will try and be short, if the Editor will be kind enough to lend me a corner of his paper; but as I expect no reward but your benefit, you must promise to read, and try to profit by what I say.

Yours truly,

GRANDPA.



LONICERA FRAGRANTISSIMA, or FRAGRANT HONEYSUCKLE.

SOMETHING ON BOTANY.

FOR THE CHILDREN.

If you look on the next page, you will see a representation of a very com-

mon plant, the Orchard Grass. We propose to give you Secretary Flint's description of this grass, and then to explain the terms he uses, and perhaps

a few others, to give you some idea of the parts of a plant, and of the terms used to describe them.

"Orchard Grass, Roug Cocksfoot, (*dactylis glomerata*.) The generic characters are, spikelets several flowered, crowded in clusters, one-sided, panicle dense at the top, branching, glumes two, herbaceous, keeled, long-pointed. Stamens three, seed oblong, acute, free. Named from *dactylus*, a finger.

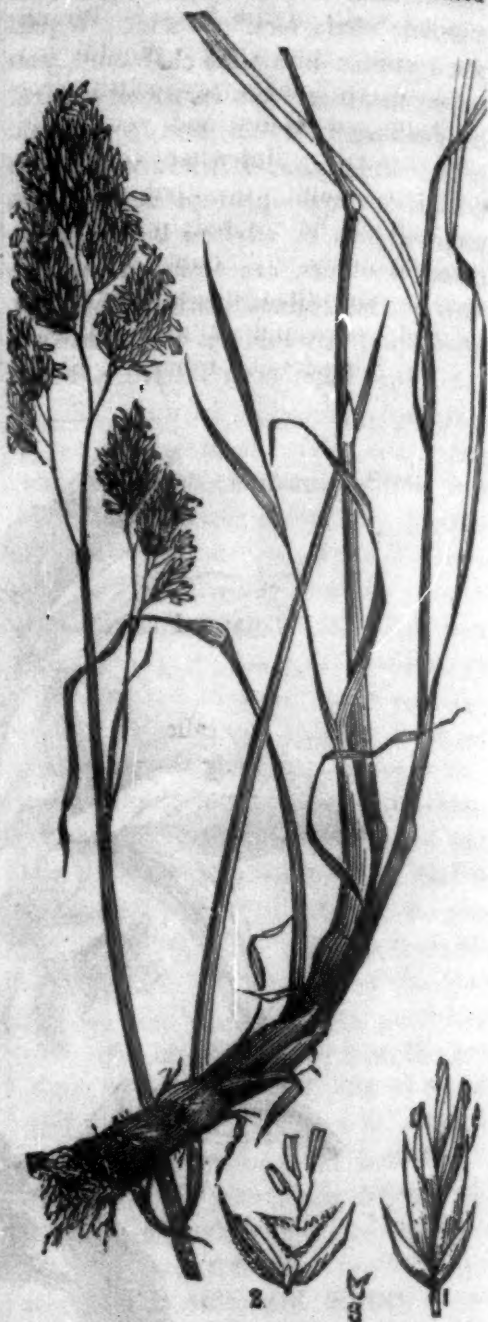
"Orchard grass flowers in dense tufts. Its stem is erect, about three feet high. I have found specimens in good soil, over five feet high. Leaves linear, flat, dark green, rough on both surfaces, which, with the fancied resemblance of its loose tufts to the foot of a barnyard fowl, have given it the common name in England of rough cocksfoot. Root perennial. Flowers in June and July. Not uncommon in fields and pastures.

"This is one of the most valuable and widely known of all the pasture grasses. It is common to every country in Europe, to the north of Africa, and to Asia, as well as to America. Its culture was introduced into England from Virginia, where it had been cultivated some years previously, in 1764. It forms one of the most common grasses of English natural pastures, on rich, deep, moist soils."

Note the terms used. Orchard Grass is plain English. Ditto of Cocksfoot. *Dactylis Glomerata* means that, if all the boys and girls in the nursery should lay their hands on each other, the fingers all pointing in one direction, the shoots of this grass are about as close together as their fingers would be. So all the botanical terms are wonderfully descriptive, if one only has a smattering of Latin.

Linneus introduced most of these terms. Do you ask why he did not use English words? There is a very good reason;—he was not an Englishman; he was a Swede. But why, then, did he not use the Swedish language; Be-

cause if he had, none but the Swedes could have read him. So he used



Latin terms for describing plants, and the learned of all nations could read his works, and translate them into their own language. This they have done, and now Linneus' works are read by all civilized nations.

Linneus divided all plants into classes; the classes he subdivided into orders; these again into genera; these into species; and these into varieties. Genus is the singular, genera the plural.

You would speak of one genus, two genera; and if you were to speak of "generic characters," we should understand you to mean the characters that belong to all the species under a particular genus.

You notice that Mr. Flint speaks of spikelets. Now when the flowers of a plant first, and afterwards the seeds grow, like the heads of wheat, rye, barley, or herdsgrass, it is called a spike, (from *spica*, an ear,) and the smaller parts of which the whole is made up, are called spikelets. In wheat, for instance, the whole head is one spike, (ear,) and it is made up of a great many spikelets, (little ears,) each of which, if it does not blast, produces a kernel. Remember this, and you will have a pretty good idea of the botanical terms, spike and spikelet.

The flower cluster in the cut before us, would rather be called a *panicle* than a *spike*, that being the name more commonly given to forms similar to this. The main flower stem is called *peduncle*, and the stems of the separate flowers are called *pedicels*. But we must not treat the children to too many hard names at once. Let them answer the following questions, and we will not trouble them more at present: What do you call a flower cluster when it grows in such a form as this? What the stem on which the whole grows? What the stems of the separate parts? What, in botany, is a spike? What a spikelet?

BOOK NOTICES, ETC.

PARIS, With *Pen and Pencil*, Its *People and Literature*, Its *Life and Business*. By DAVID W. BARTLETT, Author of "What I saw in London," "Life of Lady Jane Grey," "Life of Joan of Arc," etc., etc. Illustrated. New-York: C. M. Saxton, 25 Park Row. 1858. pp. 315.

Paris is an immense city, just about half as large as London, but containing far more to interest and enchain the attention. Everybody who can, should

spend a month or two in Paris. But next to walking its Boulevards, visiting its institutions, and conversing with its *savans*, is the privilege of perusing such a book as Mr. Bartlett's. It is a lively and communicative description of what he saw, and by its engravings and word pictures gives a very good idea of that great city, the center, in many respects, and the radiatory point of modern civilization.

HOW PLANTS GROW; a simple Introduction to Structural Botany; with a Popular Flora, or an Arrangement and Description of Common Plants, both wild and cultivated. Illustrated by 500 wood engravings. By ASA GRAY, M.D., Fisher Professor of Natural History in Harvard University. New-York: Ivison & Phinney. Chicago: S. C. Griggs & Co. 1858. pp. 233. Price, 50 cents.

It is not necessary that we should vouch for the talents, energy and high scientific attainments of Prof. Gray. He has honored his country, and been of great service to the world by his series of Botanical works. The series consists of, 1st, HOW PLANTS GROW; 2d, LESSONS IN BOTANY AND VEGETABLE PHYSIOLOGY; 3d, MANUAL OF BOTANY; 4th, MANUAL AND LESSONS in one volume; 5th, MANUAL OF BOTANY, with MOSSES AND LIVERWORTS, beautifully illustrated; 6th, STRUCTURAL AND SYSTEMATIC BOTANY, with 1300 drawings from nature. The book at the head of this notice is designed for young readers, and may be regarded as the first in the series, though we believe it was the last prepared. It is written with such clearness, and so beautifully illustrated, that children may comprehend it, while it affords food for the maturest mind—is an excellent book for children all the way from twelve years and onward, till too wise to learn. It should be in every family where there are children, or others not too wise to learn more, and especially in the farmer's family, as it explains so many things always occurring on the farm, not only interesting but useful to be known.

Emerson's Magazine, The Knickerbocker, The National Magazine, and last but not least, *The Atlantic Monthly*, are on our table, with their usual rich variety of good things. The prices of all these are reasonable; they are put up in a style somewhat permanent and yet attractive; and if not quite as exciting as the more trashy literature of the day, their readers will certainly become better informed men and women.

We have published in another part of this number, the circular of the American Pomological Society, for the appointment of a meeting, at Mozart Hall, 663 Broadway, New-York, on the 14th of Sept. next. We hope the meeting may be fully attended. No thinking man can fail to appreciate the objects of this society; and the character of its officers and members is a guarantee that its objects will be earnestly and intelligently promoted. The *poma*—apples, pears, quinces, &c., &c.—as future improvements shall be added to the most remarkable improvements of the few years past, will constitute a more important item in making up the sum of human welfare, comfort and progress, than most persons now dream of. It would afford a most rational and instructive relaxation to our good citizens of New-York, to attend the sittings of this society at Mozart Hall. There will be earnest, intelligent men from every part of the country, and we will guarantee that the speeches will be shorter than are heard on the floor of Congress, but pregnant with good sense and important information.

NEW-YORK MARKETS.

TUESDAY, July 27—6 P. M.

BREADSTUFFS.—Flour—The market was less buoyant and active, but without change of moment in prices. The sales reached about 10,000 a 11,000 bbls. within the following range of prices:

Superfine State.....	\$4 10 a	\$4 15
Extra State.....	4 25 a	4 35
Western and Ohio superfine...	4 10 a	4 15
Extra Ohio and Western.....	4 35 a	5 75

Canadian superfine and extra.....	4 40 a	5 30
Mixed to straight Southern.....	4 55 a	4 85
Southern fancy and extra.....	4 90 a	6 00
Choice extra family and bakers' b'rs.	6 00 a	7 00
Rye flour.....	3 00 a	3 55
Corn meal.....	3 70 a	4 25

PROVISIONS.—Pork—The market was firmer and active; the sales footed up about 2,000 bbls., including mess, at \$17 25 a \$17 37½ a \$17 50, and prime at \$13 90 a \$14; clear mess at \$19 50, and thin do. at 16 50 a \$16 75. Beef was quite steady and in good demand, with sales of 200 a 300 bbls., at \$11 a 11 50 for country mess, and at \$11 50 a \$13 50 for repacked Western, and extra do. at \$14 a 14 50; prime mess and beef hams were unchanged. Bacon was firm at 8½c. a 9c.

COTTON.—The sales embraced about 1,200 a 1,500 bales, closing on the basis of about 12½c. for middling uplands.

SUGARS.—The market continued firm, with sales of about 1,800 hhds., chiefly Cuba muscovado, including some 200 a 300 Porto Rico, all chiefly within the range of 7½c. a 8½c.

TOBACCO.—Very little is doing: prices are steady; sales of 27 hhds. Kentucky at 7½ a 12c; 122 bales Havana at 80 a 38c.; 76 cases Seedleaf at 3½ a 16c.; and 125 bales Cuba on private terms.

RICE is active and firmer; included in the sales was a portion for export; sales 1,050 tcs. at 3 a 3½c., as to quality.

SEEDS.—A firm market; the demand is fair, and the supply is limited of Clover at 9c. Timothy is in moderate request at \$2 50 a \$2 75 per bush. of 45 a 47 lb. Rough Flaxseed is in moderate request at \$1 50 a \$1 60 per bush. of 56 lb. Calcutta Linsced has lapsed into a quiet, but prices are sustained.

SPICES.—We hear of further transactions of 500 bags Pepper at 9c.; 350 bags Pimento at 6c.; and 50 cases nutmegs at 57½c—now held at 60c.

TALLOW.—A firm market, with a good demand; sales of 36,000 lbs at 9½c. Rough fat is steady at 6½c. cash.

WHEAT is more abundant and in good demand at, however, drooping prices. Sales 58,800 bushels, including unsound Canadian Club at 82c.; good ordinary to fair white Michigan, at \$1 12 a 1 14; inferior to fair red Western (winter,) at \$1 05 a \$1 08; unsound Milwaukee Club at 85c. a 90c.; (sound would bring 98c. a \$1;) unsound Chicago Spring at 75c. a \$1; fair white southern at \$1 32½c. a \$1 34c.

BUSINESS DIRECTORY, ETC.

and prime to choice new red Southern at \$1 30 a \$1 32 per bushel.

CORN continues scarce and quiet; sales 6,500 bushels, in store, at 71c. a 75c. for unsound mixed western; and \$1 for White Southern.

NORTHERN RYE, in store, brought 78½c. per bushel.

Nothing really new in Barley.

OATS are depressed and languid. Western 45½c. a 46c.; State 45c. a 46c.; Jersey and Pennsylvania, 40c. a 44c.; Southern 32c. a 40c. per bushel.

To ADVERTISERS.—Persons having fine Stock, Agricultural Implements, Labor-saving Machinery, Fruit and Ornamental Trees, Seeds, Books for the farmer, &c., &c., to dispose of, would find it for their interest to advertise in the *Farmer's Magazine*.

TERMS;—For anything less than a

square, the character of the advertisement being unexceptionable, 10 cents a line for each insertion.

For a square of 14 lines, (or a displayed card or notice occupying two inches up and down the column) \$1 for each insertion less than six. \$5 dollars for six insertions; \$9 for twelve insertions; and for \$10 the square will be kept in one year and the work sent to the advertiser.

For more than a square, in the same proportion, payment in all cases to be in advance.

All persons indebted to this office for the *Plough Loom and Anvil*, or for Advertising in the same, or in the *American Farmer's Magazine*, are requested to forward the amounts to us.

Money may be sent at our risk if enclosed with suitable precautions.

Address J. A. NASH,
7 Beekman St., N. Y.

Advertisements.

THE REGULAR MAIL LINE via STONINGTON, for BOSTON and PROVIDENCE—Inland Route—the shortest and most direct, carrying the Eastern Mail.

The steamers PLYMOUTH ROCK, Capt. Joel Stone, and C. VANDERBILT, Capt. W. H. Frazer, in connection with the STONINGTON and PROVIDENCE, and BOSTON and PROVIDENCE RAILROADS, leaving New-York daily (Sundays excepted) from Pier No. 2, North River, first wharf above Battery-Place, at 6 o'clock P. M., and Stonington at 8:30 P. M.; or on the arrival of the mail train which leaves Boston at 5:30 P. M.

The C. VANDERBILT, from New-York Monday, Wednesday and Friday; from Stonington Tuesday, Thursday and Saturday.

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Passengers proceed from Stonington per railroad to Providence and Boston in the Express Mail Train, reaching said places in advance of those by other routes, and in ample time for all the early morning lines connecting North and East. Passengers that prefer it, remain on board the steamer, enjoy a night's rest undisturbed, breakfast if desired, and leave Stonington in the 7 A. M. train, connecting at Providence with the 11:15 A. M. train for Boston.

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New-York, June 1, 1858.

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We would call the attention of Farmers for use this coming autumn, for their winter grain; as also to the fact that this article has arrested the rot in potatoes when decay has already commenced. Price per ton of 2000 lbs., \$35.

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We would *distinctly* give notice, as abortive imitations and attempted infringements upon our Patent have already been made, that we have *no connection whatever* with other Fertilizing Co's. of any character or name. aug. 19